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THESIS

LEADERSHIP IN GOVERNMENT ORGANIZATION CHANGE EFFORTS: A MULTI-CASE ANALYSIS

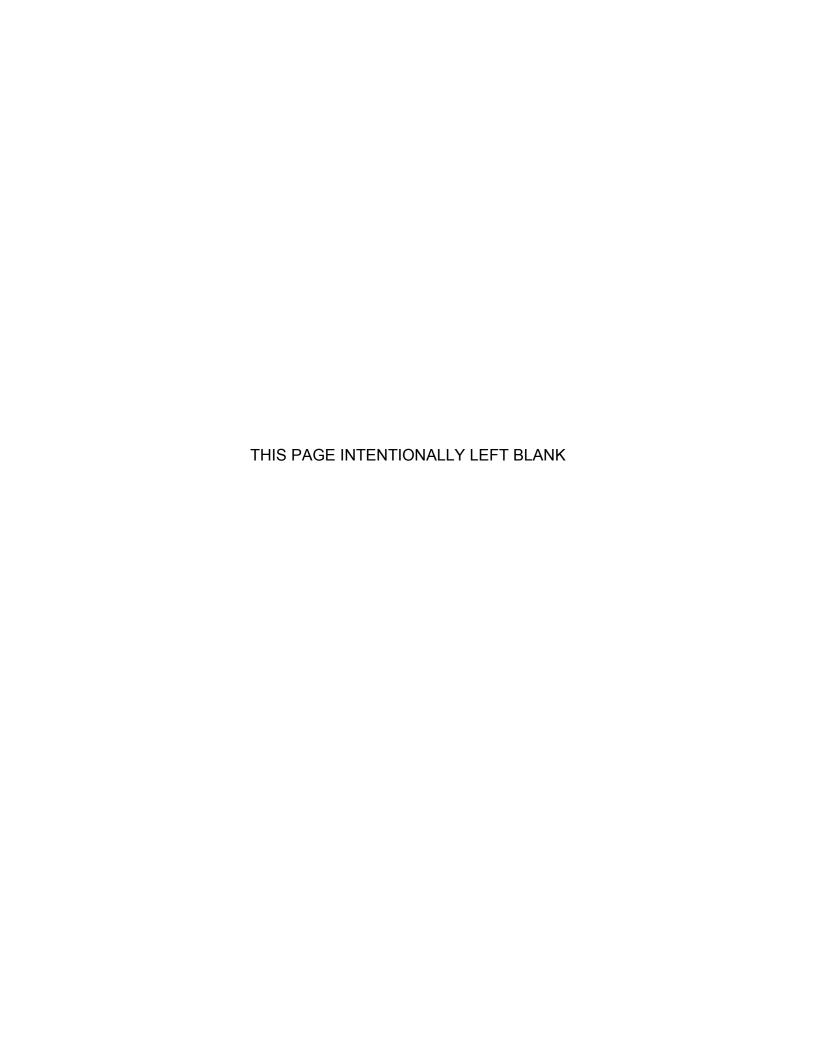
by

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September 2004

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LEADERSHIP IN GOVERNMENT ORGANIZATION CHANGE EFFORTS: A MULTI-CASE ANALYSIS

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ABSTRACT

Organizational change for the purpose of improving performance is extremely challenging, particularly for government institutions. Large bureaucracies, hierarchical structures, and deeply rooted work cultures are some characteristics of governmental organizations that have proven to be serious impediments to performance improving change. In May 2003, the NAVAIRDEPOT North Island Engineering Competency (NAVAIRNI 4.0) began a transformational process to improve organizational performance by providing higher value to its customers, generating higher quality of products and services, and attaining better financial performance. The purpose of this thesis is to analyze the experience of government organizations in implementing performance related change efforts such as Total Quality Management (TQM), Business Process Reengineering (BPR), and Activity Based Costing (ABC). Specifically, this thesis will identify leadership characteristics and strategies employed by public firms during successful transformation initiatives. isolating leadership traits associated with these successful change efforts, this thesis hopes to develop a simplified relational model that can provide NAVAIRNI 4.0 and other government organizations with effective leadership concepts for use in their own endeavor.

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I. INTRODUCTION

A. BACKGROUND

The engineering competency at the Naval Air Systems Command Depot at North Island, CA (NAVAIRNI 4.0) is a department of professional engineers and scientists that provide various technical products and services to the U.S. fleet, systems acquisition program managers (PM), foreign military sales (FMS), and the NAVAIR North Island industrial competency (NAVAIRNI 6.0). Generally, each of these customers has had a favorable view of NAVAIRNI 4.0 performance. The quality of its products and services, the cycle time for delivery, and the financial value provided over other potential suppliers of technical services has historically led customers to feel that NAVAIRNI 4.0 is the provider of choice. Still, leadership made the strategic decision in the spring of 2003 to embark upon a major overhaul of its organization, philosophy, functions, form, vision and values with the goal of dramatically improving overall performance of the competency. The NAVAIRNI 4.0 senior manager provided several reasons for this decision.

First, organizations that do not change for the better will become uncompetitive (Brian Frank, personal communication, August 27, 2003). After organizations experience a successful period, there is a tendency to believe that they have reached the pinnacle of customer service. This condition can lead to complacency, contentment with performance, an internal focus, low creativity and increased bureaucracy (Blank, 1995). As customers needs and expectations change, these organizations fail to recognize the shift and do not adapt to the new reality. The result is that customers will seek other providers that meet their renewed expectations. In today's global marketplace, the likelihood of another organization that can meet these new requirements is high.

The second reason for embarking upon change relates to leadership's vision of the future. It is believed that NAVAIRNI 4.0 is at a nexus of unprecedented opportunity. With fewer new aviation systems under

development than ever before, existing aircraft will be required to serve the needs of the warfighter longer than intended. Life extension programs, reliability improvements, and readiness-centric maintenance programs will be required to keep those systems fielded longer. This should result in many opportunities for in-service engineering organizations to develop these types of solutions. NAVAIRNI 4.0 leadership recognizes this future potential. Striving for the highest organizational performance possible through transformation is the primary strategy for becoming the provider of first choice to the warfighter and acquisition community (Brian Frank, personal communication, August 27, 2003).

Leadership at NAVAIRNI 4.0 also believes strongly that the organization is simply not attaining its potential level of performance (Brian Frank, personal communication, August 27, 2003). For over 80 years, NAVAIRNI has provided in-service engineering support to the U.S. Navy and has carved out a unique niche of supporting in-service aircraft and components that require unique repair, maintenance, and design not experienced in the private sector. At various times during this period, there have been numerous attempts to redefine the organization's mission, rework strategies and tactical plans, and revise internal processes in order to gain efficiencies. While providing some improvement, these approaches did not fundamentally change the level of performance.

While NAVAIRNI 4.0 is a leader in its field, events of the last 10-15 years have changed the competitive landscape. First, disintegration of the Soviet Union, post Gulf War military downsizing, and reduced weapon system acquisitions have led numerous private aerospace companies to enter into the business of aftermarket repair, overhaul, and in-service engineering for military aircraft as an alternate source of revenue. Secondly, an increasing trend of public-private sector competition for workload historically reserved for organic agencies has resulted in additional pressure to optimize performance. Thirdly, program managers of the few new weapon system programs currently under development or being fielded are increasingly selecting life cycle support plans managed by the system original equipment manufacturers and suppliers. These

support strategies leverage off of corporate engineering and logistics knowledge developed during the acquisition process. These life-cycle support concepts have typically resulted in partnerships with publicly funded industrial organizations, however; recent political, regulatory, and legislative changes are increasingly allowing services historically reserved for government agencies to be competed exclusively in the private sector.

Finally, NAVAIRNI 4.0 leadership desires to establish a higher moral purpose and overarching star to guide the organization into the future and create an alignment of all activities. The NAVAIRSYSCOM organization is large with several competencies, business units, and field activities in addition to headquarters. Each of these organizational subdivisions has their own vision, credo, and mission statement. As part of the NAVAIRNI 4.0 HPO transformation effort, leadership intends to create a common strategy, vision, and philosophy that is (1) understood at by all in the organization, (2) aligns with the NAVAIR Depot and NAVAIRSYSCOM vision, strategy, and philosophy, and (3) acts as a guiding and aligning principle for all efforts within the competency (Brian Frank, personal communication, August 27, 2003).

Recognizing that the path leading to high performance is long and will require much time to realize significant results, NAVAIRNI 4.0 leadership was concerned with its probability of success. This was a key reason for selection of the Diagnostic/Change Model (DCM) developed by the Commonwealth Centers for High-Performance Organizations (CCHPO). The result of a compilation of key organizational theories from numerous literature sources, this model integrates several key tenets, change mechanisms, and change agents into a single disciplined model that can be used by technically trained executives to implement continuous organizational change for higher performance. The model focuses on the critical nature of organizational leadership; its philosophy, functions, and forms and how by moving from vision through strategy, structure, and systems, organizational performance can be improved. The model also illustrates how the values of leadership, individuals, and operating systems

influence behaviors (positively and negatively), overall work culture, and ultimately the performance of the organization.

Research conducted by CCHPO over the past several years has highlighted the importance of leadership as a fundamental factor in the success of strategic initiatives involving deep organizational change in public firms. Increasingly, organizations are moving toward use of new leadership forms that are more indicative of a participative, rather than a directive system. It is hoped that by embracing these new ideas of leadership, the likelihood of transformation success will be increased. Examination of these success stories can give organizations embarking on transformation initiates important lessons learned and examples of how leadership should be employed in their own situations.

B. PURPOSE

The purpose of this thesis is to analyze the experience of government organizations in implementing performance related change efforts such as Total Quality Management (TQM), Business Process Reengineering (BPR), and Activity Based Costing (ABC). Specifically, this thesis will identify leadership characteristics and strategies employed by public firms during successful transformation initiatives. By isolating leadership traits associated with these successful change efforts, this thesis hopes to develop a simplified model that can provide NAVAIRNI 4.0 and other government organizations with effective leadership concepts for use in their own endeavor.

C. RESEARCH QUESTIONS

As stated earlier, while its customers are generally satisfied with the products, services, and efficiency of the organization, several factors have led NAVAIRNI leadership to conclude that large-scale improvements in performance are needed to remain competitive. External competition from the private sector and other government agencies, outdated and unchanging internal cultures, and lack of organization alignment to and pursuit of a single guiding principle are

viewed as potential threats to the existence and mission of the competency. By embarking upon an effort to improve performance and transform their organization, NAVAIRNI 4.0 hopes to position itself as the technical product provider of choice for its customers well into the future. The difficulty in leading governmental organization reformations presents risks to the success of this effort. Several questions warrant research and discussion that could provide valuable guidance to the management of NAVAIRNI 4.0 and other government organizations on how best to use the principle of leadership to improve the chances of a successful reformation. The most overarching of which is used as the primary research question for this thesis:

 How should leadership be employed in government organizations undergoing significant transformation initiatives designed to improve overall performance?

Supporting this primary research question are three secondary questions that, when answered, will substantially have answered the primary research question. These are as follows:

- What leadership philosophies are effective in guiding successful government organization transformations?
- What are the functions of leadership in the transformational process of a government organization?
- What forms of leadership have government organizations employed in transformation efforts?

D. BENEFITS OF STUDY

This study will provide NAVAIRNI 4.0 and other governmental organizations with examples of how successfully transformed public firms employed leadership to help drive the change effort. Contrary to the traditional belief that leadership is only the responsibility of upper management, this thesis

exposes alternative concepts of leadership and provides examples of how leadership, if widely performed across all levels of an organization, can help ensure organizational success, particularly during dramatic periods of change.

E. SCOPE AND METHODOLGY

1. Scope

The scope of this thesis will cover five areas of study. First, a discussion will be provided on the background of the NAVAIRNI 4.0, its history of organizational change, and the reasons why its leadership has embarked upon a transformational process towards high performance.

The second phase provides a discussion on key aspects and roles of leadership in organizational change. This phase will also use theories and ideas taken from literature to construct a notional model of leadership that is effective in guiding an organization's upper management, particularly through periods of change.

Phase three of this thesis is a case analysis of three governmental agencies that have successfully implemented organizational change initiatives with the goal of improving overall performance. The experiences of these organizations will be analyzed specifically for the attributes and characteristics of their leadership structure and concepts.

The fourth phase of this study will use the data extracted from the three case analyses to validate the notional leadership model (develop during phase two). Validation through examination and comparison will provide evidence supporting the viability of the leadership model for use in other organizational change efforts. By selecting government organizations as case subjects, these results will be especially applicable to other public institutions.

The fifth and final phase will provide conclusions, recommendations, and suggestions for future research on the topic of leadership in organizational change.

2. Methodology

Details of methodology used in this thesis will be further described in Chapter III, however; a generalized process for research and analysis is provided below:

- Conduct a literature review of previous research, books, magazine articles, CD-ROM systems, and other information resources on leadership theory and principles, organization performance, transformation theory, change processes, performance management and measurement to develop an organizational leadership model.
- Conduct a thorough comparative multiple case study of other public sector organizations that have successfully applied performanceimproving organization transformational processes in order to extract leadership attributes.
- Validate the leadership model through correlation of the experiences observed in the case studies with specific traits reflected in the model.

F. ORGANIZATION OF STUDY

This study consists of six chapters, which describe the driving forces behind the NAVAIRNI 4.0 organizational change effort, identify modern and theoretical leadership principles in guiding organizational change, and analyze other governmental agencies to identify attributes and characteristics of leadership used in their change efforts.

Chapter I provides a brief introduction on NAVAIRNI 4.0 background, why its leadership feels change is necessary, and why the CCHPO DCM was selected as its guiding model for transformation. Chapter II describes behavioral theory, competencies, and structures related to effective modern organizational leadership.

Chapter III identifies why studying transformed firms is beneficial, defines criteria for designation as a transformed firm, and provides a detailed review of the research methods used in this thesis. Chapter IV contains analysis of the

Central Intelligence Agency (CIA), United States Coast Guard, and US Navy Nuclear Propulsion Program case narratives for elements of leadership during implementation of performance-improving change at these government organizations. Chapter V condenses the data from the literature review into a model of leadership, discusses specific model attributes, and analyzes data extracted from case study. Those leadership attributes extracted during literature review that are supported by the case study analysis are then used to validate the leadership model for use by other government organizations. Chapter VI summarizes the research and conclusions of this thesis and provides recommendations for future research. These recommendations will cover the specific topic of leadership during public organizations transformation as well as the more general theme of organizational change.

II. ORGANIZATIONAL LEADERSHIP LITERATURE REVIEW

A review of literature sources on both organizational change and leadership revealed several key principles and factors in the effective use of leadership to guide organizational transformation efforts. These factors include the importance of attaining an optimistic leadership philosophy, developing the trust between management and subordinates, providing for widespread development of leadership capabilities amongst workers, and effective use of human resources in accomplishing the work of leadership during pursuit of change goals. Specific literature relevant sources and concepts are discussed below.

A. INTRODUCTION

In Why Executive Development Programs (Alone) Don't Change Organizations, Pickering and Matson (1992) assert that traditional executive development programs are ineffective in changing government organizations. Pickering and Matson state two primary reasons for failure of these programs result in significant organizational change. First, they note that these programs focus on placing executives in an intense learning environment, exposing them to the latest in organizational theory, and concentrating on their personal developmental needs. While this may result in life changing experiences and creation of change-ready executives, Pickering and Matson argue that placing these executives back into their organizations usually results in professional frustration and transformation failure. The second reason these development programs fail to result in real change relates to the "unready" (p. 92) state of the executive's home organization. Pickering and Matson note that the executives return to their organizations ready to lead change, re-enter their organization's deeply-rooted work culture and established environments, and attempt to employ change. Since others in their organizations did not receive the same training and experience, the executives get little support. Eventually, their efforts succumb to non-cooperation, frustration, and the overwhelming press of existing issues and problems. In examining the flaws associated with traditional organizational and executive development programs, Pickering and Matson (1992) concluded that in order to make change more effective, they needed "an integrated way for technically trained executives with little knowledge of (or interest in) 'management' as a discipline to structure and think about what they already knew of their own organizations so that they could begin to design change strategies" (p. 92).

Using their experience from working with numerous organizational management teams, Pickering and Matson developed a change model as a means of integrating several theories of organizational change and leadership into a single framework. Their model (shown in Figure 1 below) considers the critical role of leadership in developing and sharing a clear vision, defining and perpetuating desired operating values, and ensuring that strategies, structures and systems are "integrated with and supportive of the organization's shared vision and operating values" (p. 94). Pickering and Matson refer to these six elements of the model (inside of the Organization block of Figure 1) as change "levers" (p. 93). These levers (or in other words, enablers) are said to be key to moving an organization towards higher performance. A simple examination of the model's flow (designated by arrows) shows that organizational leadership, as the first lever, is the first element under the control of an organization. As such, it influences the other five elements and therefore is the most crucial first step to transforming an organization towards higher performance. Failing to successfully deploy effective leadership usually results in failure to utilize the other five levers. (Pickering, Brokaw, and Harnden, 2003)

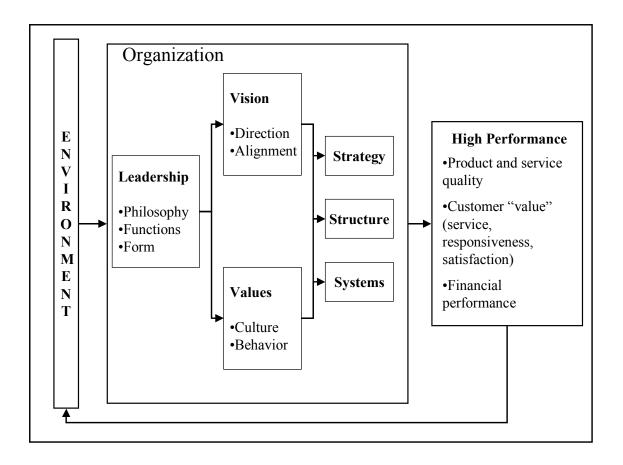


Figure 1. Organizational Change Model (Adapted from: Pickering and Matson, 1992, p. 95)

B. ORGANIZATIONAL LEADERSHIP

In the Figure 1 model, the leadership module is not individual leadership, but rather it is organizational leadership. The concept of organizational leadership is defined in *Building High Performance Organizations in the Twenty-First Century*, by Pickering, Brokaw, and Harnden (2003) and is said to consist of three parts:

A belief set—leadership philosophy—about the nature of people and their attitudes towards work, about how people are motivated, about the distribution of knowledge and creativity and how we make decisions, and about how we see the nature of work; a set of functions—the work of leadership—that must be performed at all levels of an organization if the organization is to become high-

performance; and a new set of 'forms'—formal and informal ways to share power—required to get the work of leadership done. (p. iv)

Pickering and Matson make it clear that effectively deploying leadership philosophy, functions, and form not just in upper management, but also across all levels of an organization give the best opportunity to improve overall performance of the organization. Supporting this assertion is the common understanding that most contact with customers usually occurs at the lower levels of an organization. In the case of NAVAIRNI 4.0, it is the engineers at the working level that receive most phone calls, messages, project tasking and other requests for technical assistance directly from customers. It is they who first encounter both threats and opportunities and the ability to quickly avoid crises or exploit chances hinges on basic leadership functions being contained within every individual. Pickering and Matson acknowledge that the work of leadership is extensive. They note that a crucial first step in leading an organization through a period of change is the realization that management cannot effectively do it alone (1992).

C. LEADERSHIP PHILOSOPHY

1. Theory X and Theory Y Behavior Models

Douglas McGregor (1960) in his book, *The Human Side of Enterprise*, examined theories on work behavior of individuals. He developed two opposing theories that described the assumptions of management on the nature of human behavior in the workplace. Calling these Theory X and Y, McGregor describes how managers view employee's source of motivation, level of involvement and responsibility, and commitment to the organization.

Theory X assumes that, "the average human being has an inherent dislike of work and will avoid it if he can" (p. 33). McGregor goes on to say that the systems of rewards in place at most organizations, aim to stimulate employees towards meeting organizational objectives. The effect of rewards is believed to

counteract the tendency of people to avoid work. However, under a Theory X view of the workplace, even the promise of rewards is not enough to overcome this tendency:

Because of this human characteristic of dislike for work, most people must be coerced, controlled, directed, threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives. (p. 34)

McGregor states that while rewards will be accepted and continually demanded, management under the Theory X assumes that punishment must be used in order to motivate. The third major assumption of Theory X concerns the level of responsibility for the organization willing to be born by the average worker. Theory X assumes that "the average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, and wants security above all" (p. 34). McGregor points out that while the prevailing tendency of management is to publicly espouse the value of employees to an organization, policy and processes usually do not reflect this assertion. McGregor concludes this discussion by claiming that most literature on organizational leadership and management still embrace Theory X assumptions, but that movement away from these beliefs towards those of Theory Y is occurring.

Contrary to Theory X, McGregor's (1960) Theory Y assumes the expenditure of effort is natural and that negative stimulus is not the only way to make people work. Like in Theory X, McGregor (1960) lists key assumptions and beliefs that describe Theory Y management disposition towards employees:

The expenditure of physical and mental effort in work is as natural as play or rest. (p.47)

External control and the threat of punishment are not the only means for bringing about effort towards organizational objectives. Man will exercise self-direction and self-control in the service of objectives to which he is committed. (p. 47)

Commitment to objectives is a function of the rewards associated with their achievement. (p. 47)

The average human being learns, under proper conditions, not only to accept but to seek responsibility. (p. 48)

The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population. (p. 48)

Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized. (p. 48)

McGregor acknowledges that the assumptions of Theory Y have not been fully validated and that they will be refined over the course of time with the experiences of other organizations and analysis of other researchers. However, the fundamental conclusion reached by McGregor (1960) is that Theory Y offers a superior philosophy on the management of human resources.

Above all, the assumptions of Theory Y point up the fact that the limits on human collaboration in the organizational setting are not limits of human nature but of management's ingenuity in discovering how to realize the potential represented by its human resources. (p. 48)

Finally, McGregor indicates that for organizations to continue to develop higher performance, the adoption of Theory Y beliefs and disposal of Theory X beliefs must occur. While Theory X offers management an easy rationalization for poor performance "It is due to the nature of the human resources with which we must work" (p. 48), it is a static and stagnant managerial strategy. Contrarily, under Theory Y, blame for poor performance is "placed squarely in the lap of management" (p. 48).

2. Likert's Four Leadership Styles

In New Patterns of Management (1961) and The Human Organization (1967), Dr. Rensis Likert conducted extensive research on human behavior within many different types of organizations. His extensive examinations of various leadership styles led him to hypothesize that in order to achieve high performance (as defined by profitability, good labor relations and high

productivity), organizations should optimize use of their human assets (Likert, 1967). Through extensive research and surveys of hundreds of managers across several types of organizations, Likert (1967) identified four main leadership and managerial systems:

- Exploitive: This is an authoritative system where decisions are imposed on subordinates, motivation is characterized by threats, upper management has nearly all responsibility for attaining organization goals and lower levels have none, and there is little or no communication between levels of the organization and there is little teamwork.
- Benevolent: This is also an authoritative system similar in many aspects to the exploitive system. The main differences' being that management feels a responsibility for the well-being and care of the "lower-level" workers and motivation is mainly through a system of rewards. Like the exploitive system, this system places nearly all responsibility on management and there is little communication and teamwork.
- Consultative: This system is characterized by superiors who have substantial trust in their subordinates, motivation is by rewards and limited involvement in the decision making processes. People at various levels feel some responsibility for achieving organization goals and there is a moderate amount of communication (vertical and horizontal) and teamwork.
- Participative: This group system, Likert argues, is the best management and leadership model. Leadership is by superiors who have complete confidence in their subordinates and general leadership competencies can be found across all levels of the organization. Motivation is through economic reward based on level of participation in achieving organizations goals. Personnel at all levels feel real

responsibility for the attaining organizational goals and extensive communication and cooperative teamwork is common.

Likert asserted that for an organization to attain its full potential and achieve higher performance, it needed to adopt a participative system. His surveys of numerous companies found that firms with a participative system showed "high productivity, low scrap loss, low costs, favorable attitudes, and excellent labor relations" (1967, p. 46). Likert's surveys of managers of numerous companies also provided data suggesting that most modern organizations are either benevolent or consultative and therefore have not yet extracted their full performance potential.

Likert discussed the importance of three basic concepts of the participative system on organizational performance including "use by the manager of the principle of supportive relationships, his use of group decision making and group methods of supervision, and his high performance goals for the organization" (1967, p. 47). Likert's general principle of supportive relationships states:

The leadership and other processes of the organization must be such as to ensure a maximum probability that in all interactions and in all relationships within the organization, each member, in the light of his personal background, values, desires, and expectations, will view the experience as supportive and one which builds and maintains his sense of personal worth and importance (1961, p. 103).

In applying this principle, Likert specifies that the relationship between superiors and subordinates should be one, which is "ego-building rather than ego-deflating" (1967, p. 47). In getting the best possible performance from organization members, Likert argues that links between that performance and the member's overall feeling of self-worth and importance must be established.

Likert's participative management style also emphasizes the use of group decision-making and supervision concepts. Rather than rely on "man-to-man" interactions as in the traditional hierarchical organizational structure, Likert describes a structure where each person in an organization holds membership in a group, some individuals are members of more than one group, and group

processes of decision making and supervision are utilized (1967, Ch. 4). Individuals with multiple group memberships are called "linking pins" (p. 50), and they are responsible for aligning the efforts of multiple work groups and the organizational as a whole. Figure 2 shows Likert's overlapping group and linking pin concept.

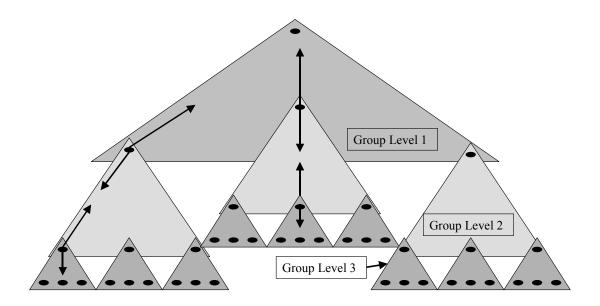


Figure 2. Likert's Overlapping Group Structure and Linking Pin Concept (Adapted from: Likert, 1967, p. 50)

Likert (1967) makes it clear that for group processes of decision making and supervision to function properly, discussion must be centered on decisions to be made, communication must be clear and understood, and important issues must be recognized and addressed. He notes that the work of groups must be in an atmosphere of "no nonsense with an emphasis on high productivity, high quality, and low costs" (p. 51). While the decision making process in a

participative system is a group endeavor, Likert emphasizes that accountability for the results of the group's actions and processes still rests with the superiors:

The group method of supervision holds the superior fully responsible for the quality of all decisions and for their implementation. He is responsible for building his subordinates into a group which makes the best decisions and carries them out well (p. 51).

Likert's third basic concept of the participative system and its effect on organizational performance centers on performance goals. In The Human Organization (1967), he cites several studies that show employee's needs generally include stable employment, job security, opportunity for advancement, In line with the principle of supportive and satisfactory compensation. relationships above, Likert maintains that meeting the needs and desires of employees is important, and this can best be done when the organization is Economic success "can only be met when the economically successful. organization, its departments, and its members have high performance goals." (p. 51). Consequently, in a participative system where all members of the organization are members of groups, and those groups are involved with decision-making and supervision processes, each and every member must have high performance aspirations. Likert concludes this point by linking the needs and desires of group members with economic performance of the organization:

Since economic and status needs are importance to members of the enterprise, the goal-setting processes of (the participative system) necessarily lead to high performance goals for each unit and the entire firm (p. 52).

Theories by Likert and McGregor on organizational leadership and work behaviors both have at their core one very important assumption, that people are motivated not by threats or intimidation, but by the desire to contribute towards fulfillment of organizational goals, as long as those goals can be embraced.

D. LEADERSHIP FUNCTIONS

John Gardner (1986) defines the "tasks" of leadership as envisioning and communicating goals, affirming values, motivating people, managing priorities, resolving conflict, explaining and teaching, serving as a symbol, representing the group, and renewing. Pickering, Brokaw, and Harnden (2002, p. IV-5) describe the five leader functions as:

- Strategic Customer Value Analysis
- Connecting Visions and Values to Strategy, Structure, and Systems
- Suprasystems Integration and Stewardship
- Learning, Thinking, Changing, Renewing
- Enabling, Empowering, and Energizing

Add to these, leadership succession planning, ensuring customer satisfaction, measuring performance, quality assurance, obtaining new business, and managing change and the result is a fairly representative set of leadership functions that, when performed, arguably help an organization to evolve, adapt, and improve. All of these functions can be loosely grouped into five general leadership competencies:

- Managing and Balancing Change
- Empowering, Mentoring, Motivating People
- Planning and Attaining Performance and Results
- Managing and Developing the Overall Enterprise
- Establishing and Leading Teams

While many of these key competencies are commonly taught and in the numerous leadership development programs available for executives, Pickering, Brokaw, and Harnden (2002) emphasize that in order for an organization to attain high performance, these leadership competencies must be present across all

levels. The Office of Personnel Management's (OPM) Senior Executive Service (SES) Qualifications Guide (1997) contains five Executive Core Qualifications (ECQ) that mirror the five general leadership competencies listed above, including Leading Change, Leading People, Results Driven, Business Acumen, and Building Coalitions/Communication. The basic descriptions of these leadership competencies are described below in an adaptation of the OPM (1997) SES ECQs.

1. Managing and Balancing Change

This core qualification encompasses the ability to develop and implement an organizational vision that integrates key program goals, priorities, values, and other factors. Inherent to this leadership function is the ability to balance change and continuity, to continually strive to improve customer service and program performance within the existing organizational framework, to create a work environment that encourages creative thinking, and to maintain focus, intensity and persistence, even under adversity. Supporting elements of this leadership function include motivating managers to incorporate vision, strategic planning, and elements of quality management into the full range of the organization's activities, integrating key issues affecting the organization, being open to change and new information, and displaying a high level of initiative, effort, and commitment.

2. Empowering, Mentoring, Motivating People

This key leadership trait involves the ability to design and implement strategies that maximize employee potential and foster high ethical standards in meeting the organization's vision, mission, and goals. Leading people requires providing leadership in setting the work force's expected performance levels, inspiring and motivating others toward goal accomplishment, empowering people by sharing power and authority, and promoting quality through effective use of the organization's performance management system. Maximizing employees'

capabilities and contributions towards organizational goals necessitates assessing of unique developmental needs, providing developmental opportunities, developing leadership through coaching and mentoring, fostering commitment and group identity, and resolving conflicts in a positive and constructive manner.

3. Planning and Attaining Performance and Results

This core leadership trait stresses accountability and continuous improvement. It includes the ability to make timely and effective decisions and produce results through strategic planning and the implementation and evaluation of programs and policies. It requires an understanding and application of procedures, requirements, regulations, processes and policies related to the enterprise. It also requires an understanding of the link between administrative competencies and mission needs. This leadership competency stresses the importance of formulating strategic program, structuring and organizing work and setting priorities, performing risk analysis and mitigation, setting program and performance standards, and developing and marketing new products and services within or outside of the organization.

4. Managing and Developing the Enterprise

This core leadership trait involves the ability to acquire and administer human, financial, material, and information resources in a manner that instills stakeholder trust and accomplishes the organization's mission. This may include assessing current and future staffing needs, overseeing the allocation of financial resources, managing the internal budgetary process, overseeing internal financial processes and external capital expenditures, and ensuring the efficient and cost-effective development and utilization of management, information systems, and other technological resources of the organization.

5. Establishing and Leading Coalitions and Teams

This core qualification involves the ability to explain, advocate, and express facts and ideas in a convincing manner and to negotiate with individuals and groups internally and externally. It also involves the ability to develop an expansive professional network with other organizations and to identify the internal and external politics that impact the work of the organization. This leadership function includes representing and speaking for the organizational unit and its work, establishing and maintaining working relationships with all internal organizational units, developing and enhancing alliances with external groups and stakeholders, working in and fostering the use workgroups and teams, considering and responding appropriately to the needs, feelings, and capabilities of different people in different situations, and communicating the position and work of the organization clearly.

E. LEADERSHIP FORMS

In the discussion of leadership philosophy above, Likert (1967) concluded that the use of participative leadership through group decision-making and supervision provided the most effective way to attain higher levels of organizational performance. A key characteristic of this leadership form is the role of the leader. In participative workgroup structures, the leader acts a chairman of the group and is responsible for making sure the group keeps oriented towards helpful and constructive problem solving (Likert, 1961). The leader rarely engages in technical matters except to express "restless dissatisfaction with present accomplishments and a stimulus to innovation (p. 58)". Likert lists the other key group leader functions as ensuring that all members are trained in decision making processes, setting top-level performance goals, fostering the development of a supportive work environment, ensuring that planning and scheduling are completed, and acting as a link to the rest of the organization. Aside from these few functions. Likert asserts that the

group leader should not participate in the "analyses and interactions" of the group and should not exert anything other than an equal share of the decision making power.

1. Distributing Power and Function

In traditional organizations, upper management usually reserves the right to make most important decisions that affect the firm. Contrary to the participative style of leadership, Likert's research indicated that exertion of hierarchical pressures on decision making resulted in less innovation, lower performance, greater internal conflict, and less motivation to produce. Even with a well-organized plan of operation, well-defined performance goal, and high technical competence, his analysis suggested that when managers used exploitive or benevolent leadership styles, the results were more often negative.

Consistent with Likert's ideas on the superiority of participative workgroups, Visa International's former CEO, Dee Hock describes two key ideas that organizations should have as part of their leadership form (Waltrop, 1996). Power and function must be retained at the lowest possible level and the governing structure must be a loose framework for dialogue, deliberation, and coordination. Hock asserts that the success of a company has more to do with factors such as these than with the "assets, expertise, operating ability, or management competence."

Through his observations and experience at Visa International, Hock likens distribution of power and function to the distribution of authority in the federal system.

Authority, in other words, comes from the bottom up, not the top down. The U. S. federal system is designed so authority rises from the people to local, state, and federal governments; during Hock's tenure at Visa, elements of the federal system were reflected in Visa leadership structure and form. Member banks send representatives to a system of national, regional, and international boards. While the system appeared to be hierarchical, the Visa hierarchy is not a chain of command. Instead, each board is

supposed to serve as a forum for members to raise common issues, debate them, and reach some kind of consensus and resolution (Waltrop, 1996, p. 84).

Hock designed Visa's leadership as a large manifestation of the participative leadership form sharing key characteristics with Likert's theories on participative leadership. Specificly, it provided a support structure, facilitated interaction, established top level goals for the business, and distributed authority for decisions to the group (composed of member banks).

2. Workgroups

Likert's (1961) analysis of organizations identified a key tenet of participative management style as the formation and use of semi-autonomous workgroups who are empowered to develop solutions to organizational problems. He points out that these workgroups are a somewhat informal structure and are parallel to the more formal hierarchical structure that dominates most organizations. Workgroups in a participative leadership structure have several characteristics that lead to their ability to more efficiently develop solutions. Likert (Ch. 4) defined several of these key characteristics:

• Membership in participative workgroups consists of people skilled in all the various leadership and membership roles and functions required for interaction between leaders and members and between members and other members. Members of the group are attracted to it and are loyal to its members, including the leader. Members and leaders also have a high degree of confidence and trust in each other regardless of the position of members within the formal hierarchical structure. The values and goals of the group are essentially the same as the relevant values and goals of its members and have been shaped by the group itself. Motivation in the group is high and the expectation is that each member will do all that he or she reasonably to accomplish the groups goals.

- All the interaction, problem-solving, decision-making activities of the group occur in a supportive atmosphere that is perpetuated by the group's leader. Suggestions, comments, ideas, information, criticisms are all offered with a helpful orientation. Similarly, these contributions are received in the same spirit. Respect is shown for the point of view of others in the way contributions are made and received.
- When necessary or advisable, other members of the group will give a
 member the help needed to accomplish successfully the goals set for
 that person. Mutual help is a characteristic of highly effective groups
 and this supportive atmosphere stimulates creativity. Value is attached
 to new, creative approaches and solutions to its problems and to the
 problems of the organization of which it is a part.
- The group knows the value of "constructive" conformity and knows
 when to use it and for what purposes. Although it does not permit
 conformity to affect adversely the creative efforts of its members, it
 does expect conformity on mechanical and administrative matters to
 save the time of members and to facilitate the group's activities
- Communication is a strong motivation of members in the group. There is high motivation in the group to use the communication process so that it best serves the interests and goals of the group. While persistently conveying important information for the group, members strive to avoid communicating extraneous information. There is an equally strong motivation to receive communications. Members are genuinely interested in relevant information from other group members. Information is welcomed and trusted and not suspected of supporting alternative agendas or non-group goals.
- Debate within effect workgroups is healthy and there is equally strong impetus to influence other members as well as to be influenced by them on matters pertaining to all group methods and processes. The

ability of the members of a group to influence each other contributes to the flexibility and adaptability of the group. Ideas and solutions remain fluid because members are able to continuously influence each other.

F. CHAPTER SUMMARY

This chapter identified reasons why typical executive development programs fail to effect organization transformation, discussed the role of leadership in changing an organization, and discussed effective leadership philosophies, functions, and forms of modern organizational theory. Key leadership characteristics of high performance organizations were discussed. These included the need for upper management to recognize all employees as motivated by level of participation and responsibility, accept that a participative leadership system based on workgroups is more effective, and endeavor to foster, develop, and deploy leadership competencies across the organization. These effective leadership concepts of high performance organizations will be highlighted in the case study analysis of successfully transformed government organizations conducted in Chapter IV and V of this study.

III. RESEARCH METHODOLGY

A. INTRODUCTION

Before studying transformed firms, it is first important to understand why case studies of the experiences of other organizations can be beneficial. Robert K. Yin (2003b) in *Case Study Research: Design and Methods* points out that case studies are the preferred research strategy when "how" or "why" questions are posed. Yin (2003b) states that case studies improve our understanding and "contribute to our knowledge of individual, group, organizational, social, political, and related phenomena" (p. 1). Since this study proposes to determine how leadership should be employed in government organizations undergoing significant change, it is believed that careful selection and study of case subjects will lead to valuable lessons learned for others to apply.

After reviewing reasons for studying transformed firms, this chapter will define the criteria for being designated as a case study subject for this research, identify the three subjects selected for this research, and then provide a detailed explanation of the study research methodology.

B. REASONS TO STUDY TRANSFORMED FIRMS

Robert K. Yin (2003a) defines two motives for analyzing successfully transformed firms. First, these firms have established performance levels and business results above and beyond those of their competition, partners, or industry. Firms that are struggling financially or desire greater profits, market share, or simply need a model by which to grow their organization are naturally going to examine successful firms over firms that are experiencing difficulties. Successful organizations that are in a similar industry, have similar workforce demographics, and are exposed to the same (or similar) market forces or environmental shifts may possibly provide an example of how a lower performing or less mature firm should look for that given time. The uncertainty in using only business metrics at a given point in time as a sole indicator of successful

transformation is that this provides no indication of longevity. Logically, financially successful firms demonstrate that they are able to exploit the existing business environment, their own organizational structures, and the weaknesses of their competitors. Indeed, Yin argues that it is possible for organizations with poor structure, processes, and facilities to exhibit superior financial performance. While an importance indicator, studying firms with good current business performance will provide, at best, lessons on how an organization should look and act in an existing business environment to attain improved outcomes.

Yin's (2003a) second reason to study successful transformed firms is that they have managed to maintain their leading performance for an extended period of time, even as revolutions in technology, changes in markets, and other environmental shifts occurred. Garvin (1993), in his article *Building a Learning Organization*, points out that maintaining a long-term competitive edge through changes in environmental conditions is an obvious indication that an organization has developed an adaptive or learning organizational structure. Those firms that have existed and flourished over extended periods of time or those that have successfully navigated through massive technological, social, and political change have had to adapt to constantly changing environments. Garvin (1993) goes on to say that the internal systems and cultures of these organizations must have had flexibility to change from one state to another in response to this change. The experiences of these organizations provide lessons and possible paths for other organizations to follow in order to develop sustained high performance.

Structuring or reinventing an organization for the purpose of attaining better performance is a complex endeavor with many different possible combinations of actions, initiatives, or programs that can be used as a path to follow. Yin's work on studying transformed firms indicates that vital lessons learned can be extracted from case studies of other similarly situated

organizations (Yin, 2003a). Lessons learned from successful (and unsuccessful) transformation efforts give firms the best chance of developing and executing change programs.

C. CRITERIA FOR DESIGNATION AS A TRANSFORMED ORGANIZATION

Key to analyzing transformed firms is scrutinizing those organizational change efforts that are indicative of true transformation vice superficial technical improvements. Yin (2003a) points out that technical improvement such as large capital investments, adoption of new production processes, and restructuring of workspaces and shop floors can be substantial and result in increases in productivity, profit, and overall performance. However, these changes may not represent a true transformation.

However, despite their significance, such improvements alone may not necessarily involve a change in the firm's culture or produce the dynamic processes needed to sustain longer-term competitiveness that characterizes transformed firms (p. 149).

Yin's statement above emphasizes two top-level requirements for a change effort to be considered transformational. First, the culture of an organization must experience a change. One way this can occur, Yin (2003a) argues, is through the greater use of employees in developing the firm's vision, strategies, and infrastructure and in sustaining effective and efficient operations. Through such things as profit-sharing, supporting employee educational development, increasing wages, improving work conditions, and implementing quality of life initiatives, firms call for greater employee participation and empowerment in a change effort. As an example, creation of work cells based on Lean manufacturing philosophy generally results in reorganization of workspaces around products vice operations or processes. Instead of moving products throughout a plant to designated process areas (machine shop, plating shop, paint shop, etc.), the processes are brought to the product. In such an arrangement, employees traditionally trained in a single operation and paid

based on their skills in that specific trade may be required to conduct multiple operations on a single part. The training and certification of those employees in multi-trades effectively create a more valuable company asset (multi-skilled employee). To be part of an effective transformation effort, the change in technical operations (Lean manufacturing cells) must be accompanied by changes in human resource systems to properly compensate and promote multi-skilled employees. Similarly, implementing improvements to human resource systems without making the complementary structural changes would also be insufficient for achieving true transformation.

Yin's (2003a) second indication of a true organizational transformation is the extent to which a change effort affects the strategic operation of the organization. Strategic operation is a generic term that can include any or all of the functions typically performed by upper management. Yin's Transformed Firms Logic Model (2003a, p. 151-152) argues that changes to a firms management systems, industrial marketing, manufacturing systems, information technology, and human resources coupled with improvements to fundamental business results is an indication of a true organizational transformation.

In short, Yin's operational definition of transformation calls for change in the fundamental organization of the structure, operations, systems and management of a whole firm, not just in its processes. Change of this magnitude is complex and can require extensive to time to effect. Yin (2003a) acknowledges this point.

The desired transforming changes need not occur all at once. The total package of changes over time, however, should be sufficiently strong and different from previous practices to signal a significant competitive repositioning of the firm (p. 150).

D. SELECTED CASE STUDIES

For analysis purposes, this research defines a suitable case subject as having all of the following characteristics:

- The organization is a governmental institution that serves a public interest, is non-profit, and is publicly funded.
- Changes to the organizations' leadership philosophy, functions, and/or form were evident.
- The change effort involved major strategic changes in the operations of the organization in areas such as strategic planning, management restructuring, shifting marketing strategy, or dramatically changing processes.
- Employee participation in the change effort was not limited to upper management.
- The change effort resulted in real and measurable improvements in the organizations' performance.

Change efforts undertaken by three organizations were selected for examination and analysis based on meeting the criteria described above. The United States Naval Nuclear Propulsion Program's (commonly known as Naval Reactors) efforts towards attaining "institution constancy", the United States Coast Guard's initiative to implement Total Quality Management (TQM), and the United States Central Intelligence Agency's (CIA) move to transform internal business processes all qualify as successfully transformed governmental institutions. Summaries of their transformation experiences and an analysis of key findings used to develop answers to research questions posed in Chapter I are provided in Chapters IV and V of this thesis.

E. METHODOLOGY OF CASE STUDY

The literature review conducted in Chapter II highlighted traits of effective leadership philosophy, functions, and forms that can help guide organizations through performance improving transformation. Those characteristics are summarized in Table 1.

Leadership Category	Characteristics
Philosophy	Theory Y Beliefs, Participative Style
Function	 Managing/Balancing Change Empowering, Mentoring, Motivating Planning/Attaining Performance and Results Managing and Developing the Enterprise Establishing and Leading Coalitions and Teams
Form	Workgroups, Teams, Distributed Power and Function

Table 1. Leadership Characteristics of High-Performance, Transformed Organizations

Given that no organization's experience with transformation can be exactly the same as any other organization, this study utilizes a multiple case study with literal replication logic to examine three organizations that have successfully implemented widespread organization change in their respective situations and environments. As defined by Yin (2003b), the multiple case study technique is a holistic research strategy that examines more than one case to develop and support generalized theories. Literal replication logic is the technique of selecting and analyzing case subjects such that "commonalities discovered support the initial set of propositions" (p. 47).

In this multiple case study, content analysis is used to determine the presence of certain words or concepts within texts or sets of texts in each case description.

Meanings and relationships of these text excerpts relative to the theories and models developed as a result of the literature review of Chapter II are then

derived using conceptual analysis. Some subjectivity is included in the conceptual analysis in deciding the level of implication of implicit terms and concepts.

The cases are analyzed in order to determine if the experiences of the three organizations show evidence of leadership traits consistent with those outlined in Table 1 above. From this analysis and the literature reviewed earlier in this study a generalized leadership model for organizational change is developed for use by other governmental organizations. This model effectively answers the study's research questions posed earlier, specifically:

- How should leadership be employed in government organizations undergoing significant transformation initiatives designed to improve overall performance?
- What leadership philosophies are effective in guiding successful government organization transformations?
- What are the functions of leadership in the transformational process of a government organization?
- What forms of leadership have government organizations employed in transformation efforts?

F. CHAPTER SUMMARY

This chapter opened with a discussion on the benefits of studying transformed firms. Organizations having undergone major change efforts in response to changing environments and having demonstrated enduring financial and business performance offer similarly situated firms valuable lessons learned. For these lessons learned to be valid, firms studied must have undergone true transformation versus superficial improvements to operations or processes. The criteria used by this study for designating a firm's change experience as a true "transformation" were identified and cases meeting these criteria were selected. The three cases chosen for this study are the U.S. Naval Reactors efforts towards attaining institution constancy, the Coast Guard's initiative to implement

TQM, and the CIA's transformation of internal business processes. Leadership characteristics for each of these organizations during their change experiences will be extracted from case narrations in the next chapter.

IV. CASE STUDY ANALYSIS

A. INTRODUCTION

This chapter contains a case analysis of the transformation experiences of U.S. Naval Reactors, the U.S. Coast Guard, and the CIA during their periods of organizational change. Specifically, excerpts that support elements of effective leadership characteristics discussed in the preceding chapter are extracted from case narrations. The data extracted from these case narrations will be used to support elements of a simplified leadership model in the following chapter.

B. INSTITUTIONAL CONSTANCY AT U.S. NAVAL REACTORS

1. Case Background

Appendix A contains an article written by John W. Crawford and Steven L. Krahn (1998) on the efforts of the U.S. Naval Nuclear Propulsion Program (a.k.a Naval Reactors) to attain institutional constancy. The article is a case study on Naval Reactors history, organization, and management and argues that this organization has achieved institutional constancy through its impeccable record of designing, building, and decommissioning naval vessel nuclear reactors safely for over 50 years. As defined by Todd LaPorte and Ann Keller (1996), institutional constancy means, "providing a sustaining foundation to enable scientists and engineers to manage nuclear materials regardless of political, social, and institutional changes affecting that mission." (p. 535). This government and military organization is evaluated, through examination of this case study and extraction of key excerpts, for characteristics of its leadership components (philosophy, function, form) that led to attainment of institutional constancy.

2. Leadership Philosophy

The leadership philosophy of Naval Reactors reflects a Theory Y management and employee behavioral pattern. Upper military management of

Naval Reactors believed that the ability of the organization to perform exceptionally rested in the hands of the personnel. Because of this, great care was taken in selecting, promoting, and developing the talent at all levels in the organization. Management also empowered the lowest level of the organization with duties and responsibilities critical to the mission of Naval Reactors. For their part, employees accepted this empowerment and responsibility and used it as their driving force towards accomplishment of the organizations goals:

Naval Reactors views its personnel, both government and contractor, as its primary asset. Obviously, all program personnel must be fully competent, especially concerning technical qualifications. Naval Reactors must have the competence, in all areas, to provide effective technical direction and guidance. Selection and training of Naval Reactors personnel is thus accorded the highest priority among all program endeavors (p. 164). -Theory Y Management Belief

The technical excellence sought in the Naval Reactors program is embodied in the high quality reliability, and safety of the components, systems, and plants that it produces. In achieving this result, Naval Reactors makes wide use of quality assurance, but it does so in a manner that preserves to line management the final responsibility for quality (p. 163). **-Theory Y Management Belief**

A principle of transcending importance is that every organizational unit and each individual has responsibilities that are defined clearly and understood thoroughly. Careful attention is given to seeing that these responsibilities are internalized, that the name of an individual is identified unambiguously with each required function, and that these responsibilities are put in writing (p. 161). -Theory Y Employee Belief, Participative Leadership Style (Responsibility)

The operational leadership employed by Naval Reactors had several attributes of both consultative and participative styles. Extensive use of workgroups, extensive vertical and horizontal communication, cooperative teamwork, motivation based on participation, and widespread responsibility for attaining organization goals were evidence of the participative style:

Formal, written goals have been the backbone of the Naval Reactors program since its inception. A formal, written goal (the commitment to produce a nuclear reactor for submarine propulsion) launched the program in the late 1940s (p. 166). -Participative Leadership Style (Specified Goals)

Since its very early stages the program has espoused a "cradle to grave responsibility" for the nuclear power plants that it designs and builds. In effect, such a philosophy operationalizes constancy, which is put to work in concepts such as responsibility, as well as in the clear definition of roles, and the need for technical excellence in all aspects of the program (p. 166). -Participative Leadership Style (Specified Goals)

Program execution is strongly marked by the application of the principle of redundancy. The objective is never to be dependent on a single source of anything: information, supply of material and equipment, design approaches, assessment of quality, or personnel. The list could extend indefinitely. Application of this principle can be seen in the early establishment of two reactor plant-engineering laboratories. The strong, competitive capabilities of these two laboratories have been an important source of strength for the Naval Reactors program, and the laboratories are often used cooperatively to address technical problems of common program interest (p. 163). -Participative Leadership Style (Cooperative Teamwork)

Communications do not just move up the chain of command. In keeping with Naval Reactor's commitment to formality, all actions taken by headquarters are promptly documented and communicated to all activities involved. This provides the basis for an ongoing dialogue between Naval Reactors headquarters, its field offices, and its contractors (p. 165). -Participative Leadership Style (Vertical and Horizontal Communication)

The extensive internal communication system that Naval Reactors has in place also ensures that it is very responsive to problems as they arise. In addition to the management reports discussed above, several special reporting systems exist to document quality problems and unusual occurrences as well as to record changes required in the formal system of manuals and procedures that establish program requirements (p. 168). -Participative Leadership Style (Vertical and Horizontal Communication)

Achieving technical excellence in design and execution is perhaps the supreme objective that informs and drives all Naval Reactors activities. All policies, practices, and procedures are directed toward achieving this objective. Achieving it requires that personnel acquire the disposition-as a way of life-to examine matters in detail with an attitude of objectivity concerning assumptions, validity of data, and the like, coupled with an imaginative conjecture of how things could possibly conspire to go wrong (p. 163). -Participative Leadership Style (Responsibility)

After suitable candidates are identified, utmost attention is given to the selection process. Each candidate is interviewed by at least three senior technical managers, personnel whose judgment is trusted by the director. The attributes sought include: technical ability, mental alertness, industry, imagination, dedication, moral integrity, and growth potential. In trying to gauge technical ability, the interviewers attempt to "get behind the grades" to understand the candidates' ability to apply the material they have learned in a logical, coherent fashion. The capstone of the process is an interview with the director, who, provided with the results of previous interviews, makes the final determination (p. 164). - Participative Leadership Style (Motivation)

The fact that Naval Reactors, as a military organization, had ultimate control of, and responsibility for, crucial decisions reserved for the top of the organization meant that elements of the consultative leadership style remained with the organization. The top position of director (formerly held by Admiral H.G. Rickover) still exerted great control over important technical and managerial issues:

Ultimate authority and responsibility resides with the director, who delegates appropriate authority to headquarters and field personnel (p. 161). -Consultative Leadership Style

For example, at a perilously late stage in the development of the programs first reactor (the prototype for the first nuclear submarine, Nautilus) Rickover made the contractor scrap a fatally flawed design for a vital safety system and instead manufacture a totally new, simpler design (p. 162). **-Consultative Leadership Style**

3. Leadership Function

Naval Reactors' organizational successes early in its existence are heavily attributed to the political and organizational skills of its top leadership in building powerful relationships with both sponsors and potential antagonists. These

entities had direct or indirect power to affect the mission, goals, and performance of the organization. By building coalitions and inculcating this process in the standards and procedures of the organization and the position of director, this legacy continues:

Very early in the development of naval nuclear power, H. G. Rickover, then a Navy captain, saw that this statutory division of responsibilities posed grave difficulties. He recognized that the development and utilization of this revolutionary new source of power should be treated as a series of closely related technical functions including research and development, detailed design, procurement of apparatus, maintenance and repair of equipment, and selection and training of personnel. With these considerations in mind, Rickover moved boldly and with remarkable political astuteness to arrange that a single organization be assigned the key responsibilities of both the Navy and the Atomic Energy Commission (the Department of Energy's predecessor) (p. 160). - Building Coalitions

Naval Reactors provides an annual review of its operations to Congress along with its budget submittal. This review goes into great depth regarding the health and safety record of the program; a summary version of this report (known as the Grey Book) is also updated annually. These comprehensive reports, coupled with regular, effective congressional testimony, are very valuable in marshaling support for Naval Reactors programs (p. 165). - **Building Coalitions**

As a top priority, he set about quickly to establish a strong and enduring relationship with Congress, specifically the Joint Committee on Atomic Energy, which had comprehensive oversight of all nuclear matters during that era (p. 160). -Building Coalitions

Communications in writing, coupled with the formal proposals required by Naval Reactors of its contractors, provide a clear written record of the actions and decisions of the program. This permits effective interfacing with outside groups, whether they are auditors (e.g., the General Accounting Office) or they provide oversight (e.g., the Advisory Committee on Reactor Safeguards, an arm of the Nuclear Regulatory Commission and even more notably, Congress) (p. 165). -Building Coalitions

In addition, since the mid-1980s, Naval Reactors has opened its program to external oversight of environmental matters. Naval Reactors has dedicated a separate division to deal with

environmental protection and compliance matters. This division, working closely with Naval Reactors ' contractors, ensures that environmental problems are rapidly identified and corrected. This rapid response has led to good working relationships between Naval Reactors and state and federal regulators in this arena (p. 167). -Building Coalitions

Empowerment of the subordinate technical and managerial staffs to satisfy agreed upon objectives, planning and attaining expected results in spite of setbacks, and managing the overall enterprise (Naval Reactors) were other easily distinguishable leadership functions:

Naval Reactors managers are imbued with the feeling of being part of a unified organization, one with dear management policies and practices and well-articulated goals. This organizational cohesion is not stultifying; all are encouraged to recommend improvements, organizational and technical, confident that optimal solutions will emerge from such ongoing dialogues (p. 167). -Empowering, Mentoring, Motivating People

His effective transmission of this experience to the Naval Reactors organization has been a major factor in its success. For example, at a perilously late stage in the development of the programs first reactor (the prototype for the first nuclear submarine, Nautilus) Rickover made the contractor scrap a fatally flawed design for a vital safety system and instead manufacture a totally new, simpler design. His courage to face technical reality and take forceful action helped foster an organizational commitment to confront technical reality in all its details early and head on whatever the consequences. This became a characteristic mode of operation at Naval Reactors and it works to avoid potential failure to meet agreed-upon program objectives, especially in safety and quality (p. 162). -Planning and Attaining Results

Program execution is strongly marked by the application of the principle of redundancy. The objective is never to be dependent on a single source of anything: information, supply of material and equipment, design approaches, assessment of quality, or personnel. The list could extend indefinitely. Application of this principle can be seen in the early establishment of two reactor plant-engineering laboratories. The strong, competitive capabilities of these two laboratories have been an important source of strength for the Naval Reactors program, and the laboratories are often

used cooperatively to address technical problems of common program interest (p. 163). -Managing and Developing the Overall Enterprise

The remaining leadership function (Managing and Balancing Change) reflects the ability of Naval reactors to develop and implement an organizational vision that integrates key program goals, priorities, values, and other factors. Safe handling of nuclear material and systems, and the life cycle responsibilities for naval nuclear reactors provides simultaneous moral, ethical, and patriotic driving forces behind the organizational vision:

In the area of demonstrating trustworthiness, Naval Reactors places particular emphasis on formal, written goals and a strong articulation of those goals. One of these goals, cradle to grave responsibility for its nuclear power plants, also helps produce the necessary commitment to constancy (p. 169). -Managing and Balancing Change

Achieving technical excellence in design and execution is perhaps the supreme objective that informs and drives all Naval Reactors activities. All policies, practices, and procedures are directed toward achieving this objective (p. 163). -Managing and Balancing Change

4. Leadership Form

The overall form of leadership at Naval Reactors developed since its inception reflects structures consistent with participative leadership philosophies. Specifically, an avoidance of "stove piped" hierarchical structures, distribution of power and authority to the lowest levels, and the widespread use of intact workgroups with specific goals and finite life spans were all characteristic of Naval Reactors organizational leadership forms:

As noted earlier, a single unified organization was established to carry out the respective responsibilities of the Atomic Energy Commission and the Navy. This unified aspect was strengthened as the program grew and the organization was extended nationwide. The heads of each field activity in the Naval Reactors program reported to the director rather than to some key assistant.

This arrangement produces a very flat organization (p. 161). - **Distribution of Power and Authority**

In such an organization communications are very important (as discussed below). The mode of operation is highly unified, yet flexible; new groups are formed and old ones disbanded based on the demands of the work (p. 161). -**Workgroups**

Field personnel truly function as a part of the headquarters organization, simply displaced by geography (p. 161). -Distribution of Power and Authority

C. TQM IMPLEMENTATION AT THE U.S. COAST GUARD

1. Case Background

Appendix B is Susan Rosegrant's (1993) Harvard Kennedy School of Government case narration title An Organizational Sea Change: Total Quality Management in the Coast Guard. In the fall of 1992, the Commandant of the Coast Guard, Admiral J. William Kime recognized a need to change the organization and improve its performance. Rosegrant (1993) indicates that Kime's concerns stemmed from an expansion of the service's mission, no increases in budget commensurate with those expanded requirements, and competition from other agencies and commercial firms. These concerns in addition to "periodic proposals by outside critics to dismantle the Coast Guard and transfer its duties" (p. 2) threatened the existence of the nation's smallest military service. Rosegrant (1993) notes that Admiral Kime sought to better utilize the service's existing budget and resources to successfully conduct all four of the service's primary missions: maritime law enforcement, maritime safety, environmental protection, and national security. He chose TQM because of three important reasons. First, TQM had already been embraced by a broad crosssection of commercial firms and federal agencies and service. Second. organizations that successfully implemented TQM reported improvements in quality of services they provided, flatter and more efficient management structures, better teamwork, and a more effective workforce.

Third, TQM offered an approach that emphasized continuous process improvement, people orientation, quantitative methods, and customer focus.

By the time of Admiral Kime's departure from the Coast Guard three years after beginning TQM implementation, Rosegrant (1993) reports that the service already began to see improvements in the areas of cost, quality, and employee involvement. This successful government organization transformation is evaluated, through examination of this case narration and extraction of key excerpts, for characteristics of its leadership components (philosophy, function, form) that contributed to its successful implementation of TQM. Specifically, the prevailing leadership philosophy will be characterized during the implementation period, evidence of the leadership functions leadership functions will be extracted, and the leadership forms used to employ and drive change will be identified.

2. Leadership Philosophy

Leadership behavior beliefs of Coast Guard management and subordinates during the TQM implementation period had a predominantly Theory Y disposition. Upper management understood that subordinates at various positions within the Coast Guard staff at headquarters and in the field would be the key change agents. The implementation and perpetuation of TQM throughout the service would rely on their innovation, energy, and stamina. Because of this belief, management bestowed leadership responsibilities and empowered subordinates to set the ultimate course of implementation, with only top-level objectives and goals provided as a guiding star. Trust in their judgment and capabilities enabled this empowerment. Similarly, subordinates that were committed to the goals of TQM and the organization exerted great effort and self-guidance in pursuit of success:

'The commandant made a very critical strategic decision that we would allow and encourage innovation in TQM,' explains Captain Houle, the leader of the IPT-2, who compares his job to being the conductor of an improvisational jazz band. 'We would have

standard tools, but within each major command we would allow them, and, in fact, encourage them, to do TQM whichever way felt right to them' (p. 9). -Theory Y Management Belief

For commands whose leaders had embraced TQM, however, the looseness of the Coast Guard's implementation plan allowed for flexibility and innovation. TQM coordinator Captain James Ingham, for example, led the Fifth District in an intensive TQM rollout, which took the Coast Guard's standard plan as just a starting point. In the first three months of the implementation, Ingham met regularly with his district admiral and chief of staff, contracted with a local quality management institution for additional training and resources, nagged senior officers to read books on quality, and arranged for Executive Steering Committee members and other senior officers to attend quality management seminars in addition to their three-day ODI training (p. 11). -Theory Y Employee Belief

The Fifth District was not alone in its impressive TQM debut. One unit and an area-level division, after implementing TQM, had demonstrated enough overall process improvements to be named in October as finalists in the Secretary of Transportation's First Annual Quality Award. 'We've been criticized by people who have since turned out to be the laggards: Tell me what to do and I'll do it, and I'll do it very well,' Captain Houle recounts. 'Those folks were left behind for a while, but it allowed the real innovators—the chargers—to surge ahead' (p. 11). -Theory Y Employee Belief

Leadership at the Coast Guard during the TQM implementation period heavily reflected Likert's participative group style. From the outset, extensive use of workgroups and substantial teamwork contributed towards attainment of the goals laid out by upper management. As mentioned above, upper management did not prescribe the methods to be used in meeting goals, but simply expressed the desired end state through its vision. Workgroups included both "true workgroups" (those with specific goals and finite lives), and teams (groups with a more generalized mission and indefinite life):

By January 1991, the team had hammered out a five-sentence Coast Guard Vision Statement, gotten Kime's approval, and distributed it to all the flag officers. 'Ideally, we would have liked the commandant to put pen to paper and spill his guts out on what he

thought the Coast Guard of the future should be,' remarked one team member, 'but he didn't do that' (p 5). -Participative Leadership Style (Decisions)

In between were a cascading series of groups, usually linked vertically by having a member of the higher level group chair the next lower group, and often linked horizontally by drawing team members from across functional boundaries. Executive Steering Committees, the highest-level group within major commands at headquarters, area, and district levels, were to develop plans, review progress, and reward success on a more local level (p. 6). - Participative Leadership Style (Teamwork)

Extensive vertical and horizontal communication was prevalent from the beginning of the TQM implementation effort. Vertical communication in the form of directives, instructions, and guidance from top management to senior officers was disseminated throughout the Coast Guard. While not explicitly a characteristic of the participative leadership style, this strong vertical communication was necessary since the Coast Guard was still a military organization with a hierarchical organizational structure. Complementing this legacy communication philosophy, a new horizontal communication structure took hold once the use of intact workgroups increased. The new structure created the nested matrix of communications characteristic of the participative leadership style:

...Admiral Kime – who saw spreading the word about TQM as a key leadership function – stepped up his discussions with senior officers and others about the importance of TQM. 'I was talking everywhere I went about what we were doing and why I felt this was not only a good idea, but something that was almost a necessity,' he says. At the same time, IPT-1 published the first commandant instructions devoted to TQM. Although the instruction did not address why the Coast Guard was implementing TQM, it briefly described the philosophy, introduced the overlay structure concept, and provided a glossary of TQM terms. The second instruction, released in February, gave more details about the overlay and training procedures, and in June, the group sent out two final instructions, one on communications and measurement, and one on rewards and recognition. The four instructions

constituted the formal guidance give to Coast Guard personnel for implementing TQM (p. 7). -Participative Leadership Style (Communications)

According to Houle, the guidebook for the first time presented coordinators with a clear plan. The document described TQM structural overlay, how each piece fit in the overlay, the basic responsibilities of the various TQM teams and boards, and what each entity's charter should contain (p. 10). -Participative Leadership Style (Communications)

There were also less heralded improvements. At headquarters, many people were most impressed not by the stories of specific money- or resource-saving innovations, but by the fact that people were talking to each other. The increase in communication was slowly changing how things got done (p. 12). -Participative Leadership Style (Communications)

But under the TQM process, we have dialogue going on among groups that never, ever talked about issues across the boundaries. The net result is that rather than having a fix put into place based on the strength and personality of the person who called the meeting, and that would only live as long as that person was there to beat the system into submission, you now are putting into place something that will endure. Through a process of inclusion you have a long-term solution (p. 12). -Participative Leadership Style (Communications)

The participative leadership style employs motivating forces that are based on reward commensurate with level of participation in achieving organizational goals. While not necessarily indicative of new widespread motivating forces based on this concept, excerpts from the case study do indicate that promotion of senior officers were predominantly based on the commitment to deploy TQM across the organization. Indeed, that goal is the most important:

More significantly, perhaps, senior officials agreed that the four admirals considered most likely to succeed Kime were all supporters of a quality management program. 'The people who are not supporters will not compete well for the commandant position.' Ingham, the incoming quality advisor, asserts. 'I predict the name may change. But the content of what we're embarked on will not change' (p. 17-18) -Participative Leadership Style (Motivation)

At its November 1992 meeting, the Quality Council took Houle's advice and approved the new position of a quality advisor reporting directly to Admiral Kime and overseeing the Quality Management Branch. Soon after, council chose Captain James Ingham, who had already made a mark as TQM coordinator for the Fifth District, to fill the post (p. 15). -Participative Leadership Style (Motivation)

3. Leadership Function

Commonly, a first major step in managing and leading a change effort is to articulate the organizations vision and desired end state. This top-level guidance is what all subordinates use to align their independent tactical efforts towards implementing the prescribed change. Clearly, a major concern within upper management at the Coast Guard was that these efforts towards implementing change would interfere with the service's primary missions. The competing priorities of implementing widespread organizational change and maintaining a superior level of service to the nation are leadership functions required for successful organizational change:

At the end of the day, Kime directed that an Implementation Planning Team (IPT-1) be chartered to develop a two-year TQM implementation plan under the leadership of a top-level Executive Guidance Team. Among its tasks, the ten-member IPT-1 team was to create a Coast Guard vision statement, articulating the agency's desired future state; a structure of committees and groups to lead, support, and carry out the implementation (p. 5). **-Managing and Balancing Change**

As its array of responsibilities grew, however, the Coast Guard, like other federal agencies, was also confronting the reality of leaner times. The federal government had proclaimed its commitment to cutting costs, improving productivity, and becoming more efficient, and although the Coast Guard's budget had risen slightly in the previous two years to \$2.7 billion in 1990, the sense through the organization was that the service was being asked to do substantially more with less. In TQM, Admiral Kime saw the dual promise of boosting internal efficiencies with offering proof that the Coast Guard was doing all that it could to trim fat and streamline operations (p. 2). **-Managing and Balancing Change**

Since being placed under the Department of Transportation in 1967, the agency tended to favor one mission area at the expense of the others, a strategy that the commandant believed had weakened the Coast Guard. But Kime also realized it would take more than a reapportionment of resources to convince skeptics that the service was ideally suited to carry out the diverse tasks it had been given. Here, again, TQM might help in demonstrating the Coast Guard's commitment to accomplishing all its assigned missions capably and at a reasonable cost (p. 2-3). -Managing and Balancing Change

The use of workgroups and teams to meet the objectives outlined by upper management and the presence and source of subordinate motivation at the Coast Guard during TQM implementation is discussed extensively above. Most of the people outside of senior management did not know much about TQM or its implementation, so in order to fully empower employees, creation of a system of learning and relearning was necessary. The Coast Guard addressed this by first conducting widespread training on TQM fundamentals. Secondly, the service designed an internal TQM training program and created an institute to promulgate the latest TQM training to the ever-changing workforce:

In January 1991, as IPT-1 was laying out the fundamental policies and structures that would support the TQM implementation, the first groups of TQM coordinators and facilitators reported to the Coast Guard's Reserve Training Center in Yorktown, Virginia, for training. ODI offered three different programs: about 150 coordinators would attend five-day sessions; the approximately 350 facilitators would receive the most training – nine days – to prepare them for becoming teachers themselves; and some 1,800 senior managers who would be serving on executive steering committees and quality management boards were slated to begin three-day workshops in May (p. 6-7). **-Empowerment, Mentoring, Motivating**

In addition, IPT-2 had to design and establish the Leadership Institute, a TQM school, to be based at the Coast Guard Training Center in Petaluma, California, that would eventually assume responsibility for all training and consultation (p. 9). - **Empowerment, Mentoring, Motivating**

The excerpts above that outline IPT-1 ad IPT-2 efforts at managing and leading change and empowering, mentoring, and motivating the workforce also

provide strong evidence of strategic planning and the implementation and evaluation of programs and policies. In this case, the ten-member IPT-1 was chartered to develop the implementation plan and structure of groups and teams that would be used to put that plan into action. IPT-2 was responsible the actual execution of the implementation plan, necessary resource procurement, monitoring and evaluating the process, communicating problems to upper management, and recommending necessary changes (Rosegrant, 1993). All of these activities engaged in by IPT-1 and IPT-2 are direct examples of the "Planning and Attaining Performance and Results" and the "Establishing and Leading Teams" leadership functions. The following excerpt provides additional support for this premise:

In May IPT-1 presented its two-year implementation plan. Phase 1 covered the work just completed, while Phase 2 would include dissolving IPT-1 and forming a new Implementation Project Team (IPT-2), activating the overlay structure, and chartering the first QATs. During Phase 3, the Leadership Institution would open, and there would be a solid network of working QATs. The final phase would see a trained 'critical mass' of personnel, a TQM impact review, the retirement of IPT-2, and transition to 'routine TQM maintenance' (p. 6) -Planning and Attaining Performance and Results

The last leadership function, "Managing and Developing the Overall Enterprise" in this case applies to the management and implementation of TQM throughout the Coast Guard. This primary function was assigned to the 20+ senior officers in management assigned to IPT-1 and IPT-2 as part of their charters:

Like IPT-1, IPT-2 had a full plate. The team was chartered to execute the TQM implementation plan; to identify and procure sufficient resources to do that; to monitor and evaluate the process; to communicate problems and needs to the Quality Council; and to recommend necessary changes (p. 9). -Managing and Developing the Overall Enterprise

4. Leadership Form

As discussed earlier, the leadership style and philosophy exercised by the Coast Guard during implementation of TQM used forms of leadership consistent with participative leadership structures. Management at the Coast Guard realized that distributing power and authority to the absolute lowest levels of the organization was not possible. After all, the organization was still a military service and the concepts of accountability and responsibility still followed strict military codes and regulations. However, the creation of a "shadow" organizational structure that did not interfere with the hierarchical military structure contributed greatly to the success of TQM implementation:

Among the team's – and the commandant's – key concerns was the creation of an implementation framework that would not challenge or interfere with the Coast Guard's existing operational chain of command. 'A lot of concern was expressed by the more skeptical members of our organization at the meeting in Williamsburg about the fact that we do have a certain organizational structure.' Kime explains, 'that we're a military organization, and that we've got to be very careful about how we do this' (p. 6). -Distribution of Power and Authority

The plan that the team devised, with Kime's approval, seemed to fit that requirement. The 'parallel overlay structure,' as it was described, established a hierarchy of groups linking all parts of the Coast Guard, relying on the existing chain of command without exactly duplicating it. At the top, the Quality Council, made up of the commandant and the four most senior flag officers, would be responsible for the overall TQM plan – setting policy, providing resources, establishing measures, and rewarding TQM efforts (p.

6). -Distribution of Power and Authority

The use of naturally occurring workgroups was a cornerstone of the TQM implementation plan. These groups were not hierarchical or centrally controlled, but rather had semi-autonomy and were empowered to develop solutions to specific problems. Membership was centered around the applicable functions needed to solve those problems.

Quality Management Boards, comprised of senior managers from a specific command level, were to be cross-functional entities

responsible for an individual command's tactical TQM efforts. Among the boards' most important functions would be to charter Quality Action Teams (QATs), small groups convened to address specific problems (p. 6). -**Workgroups**

At the bottom, natural work groups, comprised of any group of individuals who normally shared in a task, would apply TQM tools to continuously improve their own work processes (p. 6). - **Workgroups**

After IPT-1 presented its implementation plan in May 1991, the team was dissolved and replaced by the TQM Implementation Project Team (IPT-2)...(p. 8). -Workgroups

The final phase would see a trained 'critical mass' of personnel, a TQM impact review, the retirement of IPT-2, and transition to 'routine TQM maintenance' (p. 7). -Workgroups

D. BUSINESS PROCESS TRANSFORMATION AT THE CIA

1. Case Background

Appendix C is Professor Steven Kelman's (1999a, 1999b, and 1999c) Harvard Kennedy School of Government case narration and epilogue titled *Business Process Transformation at the CIA*.

Kelman (1999a) notes that during the 1990's, the CIA, like several other federal agencies, was under pressure to reduce cost because of the need to reduce the federal budget deficit and because of the end of the Cold War. At the CIA, the Directorate of Administration (DA) was the group furthest from the primary mission of the CIA so it bore a disproportionate share of budget cuts. Their mission was to provide all the support services for the three primary mission directorates: The Directorate of Operations (DO, responsible for intelligence-gathering by humans), Directorate of Intelligence (DI, responsible for intelligence analysis), and the Directorate of Science and Technology (DS&T, responsible for intelligence gathering by technical means such as satellites and eavesdropping). Support services included personnel management, training, information technology, and logistics.

Compounding the vulnerability to budget cuts due to its indirect link with the CIA's mission, the perception of its primary customers (the other three directorates) was that the DA inefficiently utilized its existing resources and sometimes delivered poor service quality services. In 1996, the new leader of the DA, Dick Calder, launched an organizational change initiative that radically transformed the way the DA did business; the way it interacted with its customers; and even the way its customers behaved.

The DA leadership proposed to give back its annual budget allocation to the three missions directorates and then competitively offer and sell the services of its fifteen support offices back to the directorates. This strategy had two primary goals. First, giving up control of its budget and its monopoly as a service provider (through competition) would stimulate the DA to provide better services at lower cost. Second, putting the administrative services budget in the hands of the customers would make the missions directorates co-responsible for solving the agencies shrinking administrative services budget (Kelman, 1999a).

The transformations process introduced by DA management in late 1996 and 1997 aimed to use new management techniques such as activity based costing and total quality management, and the concept of a working capital fund to operate the DA under the new business strategy. Through a process of preparation, limited deployment, adjustment, reengineering, and expansion, the DA was able to attain several key successes in its new business model within a few years. These successes helped maintain external support, generate additional internal support, and provide welcome momentum to the transformation initiative.

In preparing for, launching, executing, and sustaining this successful business process transformation, leadership at the DA exhibited key leadership characteristics that warrant examination. These characteristics are captured through excerpts from Appendix C text and mapped to leadership philosophies, functions, and forms discussed in this thesis.

2. Leadership Philosophy

Management at the DA under Dick Calder believed in ability of employees to use innovation and creativity to solve the directorate's problems. In preparation for deployment of the "budget giveback" program, much work had to be done by employees and middle managers to quantify costs of doing business so that the customers could be accurately charged. A great deal of management trust was necessary to turn this critical function over to subordinates:

So Ericson got to work figuring out how specifically to implement giveback. ABC was of course an important first step, since if an office's services went up for sale, and had to be funded through payments from customers rather than appropriated funds, the operation would need to know what its costs were so it knew what to charge (1999a, p. 7). **-Theory Y Management Belief**

Furthermore, responsibility for the overall budgetary problems of the entire organization (CIA) was bestowed upon employees and managers of the DA's customers, that is, the employees of the other directorates. This delegation of leadership responsibility is a key tenet of Theory Y leadership beliefs:

The second (initiative advantage) was that it would make the mission directorates co-responsible for thinking about how to deal with the shrinking Agency administrative service budget (since they would now have an incentive to reduce unnecessary demand for services because they were paying for them instead of getting them 'for free') (1999a, p. 5). -Theory Y Management Belief

Evidence of direct employee empowerment could not be found in the case study, however; authority and control was transferred between the DA and the other directorate. This action of giving the customer unprecedented control over the DA's budget reflected internal institutional empowerment:

They announced a 'Fundamental Shift': the 'support budget [would be] transferred to customer/mission managers' (1999a, p. 8). **Theory Y Management Belief**

The reaction of DA employees to the launch of the organizational change effort was initially resistant. The culture at the CIA in general and within the DA

specifically was such that the imperative for change was not recognized. DA employees felt misunderstood and blamed the other directorates as the source of their problems. However, there were instances where once employees understood the goals of the effort and the need for change, they became committed to contributing to the mission:

'I was one of the first converts to what Dick was trying to do,' Good recalls. 'The first time I head Dick talking about a working capital fund, I was convinced. He's pretty passionate. And I had read management books and articles in the *Harvard Business Review* on my own that made similar points to the ones he was making' (1999a, p. 12). -**Theory Y Employee Belief**

As the business process transformation continued with the launching of the first pilot program, the Logistics Operations Center, employees exhibited their own innovations and creativity in finding new ways to save money. This initiative is indicative of the effort that can be expected when employees embrace an organizational goal, have that goal communicated to them, and are given latitude to implement new ideas:

A number of contractor employees and detailees were let go. Previously, the LOC had staffed at a capacity allowing it to deal with sudden surges in demand for its services. Now, instead, it contracted with a commercial firm to deliver unclassified material, with another company to deliver cleared contractor employees on short notice, in the event of demand surges (1999b, p. 1). -Theory Y Employee Belief

Truck cleaners had previously done their work on Saturdays, when they needed two escorts, on overtime pay, provided by the LOC. They began to work on Fridays, when things were quiet (so they could get their jobs done) but no escorts were needed (1999b, p. 1). -Theory Y Employee Belief

Truck drivers on the road started buying gas at cheaper gas stations, rather than more expensive truck stops (1999b, p. 1). - **Theory Y Employee Belief**

Customer service representatives were merged into the transportation booking operation; the two kinds of employees were cross-trained to do each other's jobs, to minimize employee downtime due to peaks and valleys in demand for the two kinds of

skills. Something similar was done with employees who did receiving of inbound shipments and crating of outbound ones (1999b, p. 2). -Theory Y Employee Belief

Early in the transformation process upper management at the DA utilized techniques indicative of a participative leadership style including the use of extensive teamwork and regular vertical and horizontal communication. Teamwork included use of internal teams within DA and cross-functional teams with representatives of the other directorates. Horizontal communication came in the form of meetings between office directors and upper management and the verbal exchanges therein. Vertical communication predominantly occurred via written communication or "town meetings" with employees:

At the end of 1996, Calder held a series of town meetings with employees over a two-month period to talk about his goals for business process transformation in the DA (1999a, p. 8). - Participative Leadership Style (Communication)

Calder realized that if any of this was every going to succeed, he had a massive task of organizational change management on his hands. So, as a first step, he did what many organizational leaders do when they want to get a process of change going. In May 1996, he called an offsite meeting for DA office directors at the Wye River Plantation (1999a, p. 5). -Participative Leadership Style (Communication)

In August a glossy booklet called The River House Report appeared to 'summarize' the conclusions of the Wye retreat (1999a, p. 5). -Participative Leadership Style (Communication)

The document also clearly introduced the idea that the DA might have to compete for customer business. 'Competition is a new word in our setting. But it's not a pejorative word. We know about it and we welcome it elsewhere – indeed it's the central theme of our economic system' (1999a, p. 6). -Participative Leadership Style (Communication)

The document also mentioned – as part of a subordinate clause referring to development of a 'business ethic' – moving 'into a competitive, internal marketplace where warranted or to better manage services we provide centrally.' And it did announce that 'we will begin a yearly process of selecting two or three business

areas for competition for implementation in [fiscal year] 1999' (1999a, p. 6). -Participative Leadership Style (Communication)

As in most such meetings, lots of different ideas were tossed around. The office directors did a fair amount of complaining about how they were misunderstood and expressed the hope that the ABC process would help them demonstrate to the mission directorates that the DA wasn't a bloated bureaucracy. But amidst the cacophony, Grayson in particular was vocal about the DA's need to abandon its monopoly status and subject itself to the test of the marketplace (1999a, p. 5). -Participative Leadership Style (Teamwork)

Sources of motivation in the workforce at the DA, similar to the Coast Guard experience with TQM implementation, was based on a reward system related to promotional opportunities for those who embraced the change effort. Assignment of key personnel to lead parts of the effort was based on their level of participation and support for the overall organizational goal:

Calder chose a DA manager, Paul Ericson, who had run the Office of Training and Education, to head the new office. It was an interesting choice, since Ericson was an abrasive, controversial figure ('the most disliked program director in the DA' according to one critic). Word got out that Ericson had been given marching orders to be a 'junkyard dog' vis-à-vis the offices (1999a, p. 7). - Participative Leadership Style (Motivation)

Good has been a supervisor placed in charge of the LOC's ABC effort. When his predecessor was promoted in April 1997 to be the Agency's chief procurement official, Calder chose Good as LOC chief (1999a, p. 11). -Participative Leadership Style (Motivation)

Calder left much of the implementation preparation work up to the individual offices within the DA. This included the costing of services and development of business plans necessary for deployment of the "pay-as-you-go" strategy, one of the top-level goals conveyed by management to the organization's subordinates:

In October 1996, Calder established a Business Process Transformation Program Office (BPTPO), reporting directly to him, to 'help' the offices undertake activity-based costing (1999a, p. 7). - **Participative Leadership Style (Decisions)**

But there was an important next step as well: the development, by offices destined for competition, of business plans that showed how they would improve, tailor, and market their services against likely

commercial competitors so as to be able to survive without appropriated funds (a999a, p. 7). -Participative Leadership Style (Decisions)

3. Leadership Function

Management's drive to improve customer service and organizational performance within the existing structural framework of the CIA, the extensive incorporation of vision in strategic planning that preceded launch of the business process transformation initiative, and utilization of new ideas and information demonstrated the existence of the change management leadership function:

It presented competition as one prong in a two-part over-arching strategy the document summarized with the phrases, 'We will be our customers' provider of choice,' and 'we will be – now and future – an employer of choice' (1999a, p. 6). **-Managing and Balancing Change**

That task force came upon an accounting technique, originally developed by Harvard Business School professor Robert Kaplan, called 'activity-based costing' (ABC), a methodology that allowed companies to learn how various indirect costs should be assigned to a company's different activities or products. Calder decided he needed to bring ABC to the DA (1999a, p. 4). -Managing and Balancing Change

Building external and internal coalitions was critical to the success of the organizational change program. The endorsement of Stakeholders such as Congress, the White House, the Office of Management and Budget, and the National Security Agency would help provide external pressure on the change efforts. Internal teaming with key competencies needed in the DA's restructuring would also be needed. These activities, indicative of the Establishing and Leading Teams leadership function were prevalent:

To establish a working capital fund, the CIA needed congressional approval. In early 1997, Calder and Ericson went to the Office of

Management and Budget to get administration endorsement for language in the upcoming CIA reauthorization bill allowing such a fund to be set up, and then to the congressional authorizing committees that would need to approve the idea (1999a, p. 8). - **Building Coalitions**

In their visits, they were accompanied by the chief legislative liaison in the CIA Office of the General Counsel. (Mary Sturtevant, the Agency's new comptroller, or chief financial/budget official, and a support of Calder's ideas, helped Calder to get the legislative liaison to go with them downtown.) (1999a, p. 8-9). **-Building Coalitions**

Calder got Mary Sturtevant, the comptroller and a strong supporter of his efforts, to help them with this potentially deadly problem. Sturtevant announced to the mission directorates that savings after giveback would not be scooped up (1999a, p. 10). **-Building Coalitions**

The DA leadership recognized advantages to becoming a provider of choice for administrative services within the CIA. If they could get control over their costs and processes and become an efficient service provider, recent reforms in government would allow them to compete for business outside of the CIA. This forward-looking and aggressive business plan demonstrates excellent capacity in the Planning and Attaining Performance and Results leadership competency:

During these months, Calder's team also came upon two new ideas that allowed them to give more flesh to their plan. One was the idea of franchising, which Ericson learned about at the website of Vice President Al Gore's 'reinventing government' program. Under the franchising concept, one agency was authorized to sell its services to another agency...(1999a, p. 7). -Planning and Attaining Performance and Results

...Franchising was appealing to Calder because it added a carrot for the DA in addition to the stick of losing appropriated funds. The carrot was the prospect of gaining new revenue by selling DA services to other agencies in the intelligence and diplomatic communities...(1999a, p. 7-8). -Planning and Attaining Performance and Results

In developing the complex financial arrangements to allow for DA's customers to reclaim the funding that they saved through cutting back their own needs for services or from the efficiencies gained in the DA's processes, enormous competency in managing several elements of the overall enterprise was necessary:

The perception (and often the reality) in government agencies is that if an operation succeeds in saving some amount of money by doing business in a smarter way or eliminating an unnecessary activity, the entire sum will be taken away (or 'scooped up') by the organizations own budgeters, by the Office of Management and Budget, or by congressional appropriations committees at the first opportunity an redistributed to other programs or activities seen as more worthy. This, of course, eliminates any incentive to save money in the first place. Business as usual would kill giveback immediately. The way to convince customers that the new order was a good idea was to dangle in front of them the prospect that if they didn't spend their whole giveback because they had gone to cheaper sources or economized on their use of services, the money left over would be theirs to keep for mission needs (1999a, p. 10). -Managing and Developing the Overall Enterprise

4. Leadership Form

The DA transitioned from an organization that was externally funded (outside control of the customers, that is) with little incentive to improve its efficiency or service quality into one that relied on customers to select it, amongst other competitors, as the provider of choice. Doing this in an organization with a deeply rooted work culture in a short amount of time (as was perceived to be required due to budgetary pressures) required a revolutionary approach and redistribution of power and authority. DA leadership elected to adopt an approach that took the ultimate lever of power and authority, its entire operating budget, and placed it in the hands of its customers. The courage of this move is compounded by the fact that the three mission directorates had the power to choose other commercial or governmental firms for many of the services the DA historically provided:

In 1996 the DA embarked on a radical journey. As a solution for its budget and responsiveness problems, the DA proposed to give its budget back to the mission directorates and to sell its services to those directorates, in competition with commercial (or even other government agency) providers. The DA would exchange the security of its status as a monopoly provider for the uncertainty of competition (1999a, p. 3). -Distribution of Power and Authority

The use of groups within the DA for the purposes of specific problemsolving activities is prevalent. As mentioned earlier, workgroups were used to develop in business plans for the individual offices. The case study also implies that the task of developing accurate costing of services was left up each office, with the help of a central facilitator (Business Process Transformation Program Office). These are two instances that support the premise that workgroups were an important leadership form utilized by the DA during its organizational change effort.

E. CHAPTER SUMMARY

This chapter provided an initial extraction and analysis of case data associated with the successful transformation experiences of the U.S. Naval Reactor's efforts towards attaining institution constancy, the Coast Guard's initiative to implement TQM, and the CIA's transformation of internal business processes. Case narrations from each experience were reviewed and excerpts were extracted using content analysis and then categorized as elements of leadership philosophy, function, or form in accordance with the "Leadership Characteristics of High-Performance, Transformed Organizations" derived in Chapter III of this thesis (see Table 1). These excerpts will be used in the Chapter IV to develop data tables that support a relational model of leadership developed from the Chapter II literature review.

V. DATA RESULTS AND ANALYSIS

A. INTRODUCTION

The case analysis of Chapter IV provides supporting evidence that the three subject organizations (Naval Reactors, U.S. Coast Guard, and CIA) deployed leadership philosophy, functions, and form consistent with the traits of effective leadership discussed in Chapter II and III. Data results and analysis presented and conducted in this chapter begins by condensing the data from the literature review into a new model of leadership. Then, specific attributes of the model are described. Finally, a tabular presentation of data extracted from each organization examined during the case study analysis is provided. It will be shown that each of the key characteristics of this new leadership model is supported by the experiences of the three cases examined in this study. By showing that other governmental organizations have successfully deployed leadership structures consistent with the model, this chapter intends to validate and verify the utility of the model for other government organizations.

B. THE LEADERSHIP MODEL

The leadership model developed in this study for government organizations implementing change contains elements of the participative leadership system. Literature reviewed in Chapter II indicates that this system is the most effective method of problem solving in modern human-centered organizations. A review of the model's structure shown in Figure 2 reveals that distribution of power and authority in the form of empowered workgroups is the outcome from an organization's successful deployment of leadership philosophy and function. Discussion of model elements and the relationship between Theory Y beliefs, leadership functions, and distribution of power and authority is provided below.

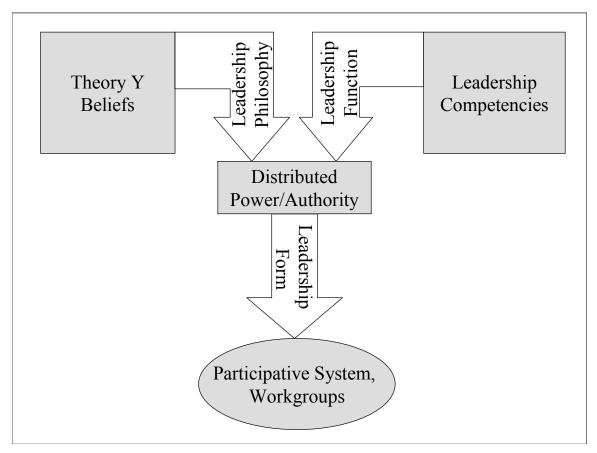


Figure 3. Leadership Model for High-Performance

Organizations employing a participative style of leadership philosophy optimize use of their human resources and achievement of higher performance. It is through the use of workgroups that participative leadership styles are deployed in organizations. A key enabler of these independent, cross-functional workgroups is the empowerment bestowed upon them by upper management. Without this empowerment, the workgroups would simply be less effective extensions of the hierarchical management structure. One of two key prerequisites to distribution of power and authority is the belief by management that employees as responsible enough to look out for the well-being of the firm, capable of using ingenuity and innovation to solve problems, and internally driven by a desire to help the organization flourish. This disposition makes up the core

of Theory Y beliefs from McGregor (1960) shown in Table 2 and forms a fundamental basis of trust in employees by management.

Theory Y Trait	Management	Employees
Motivation	 Believes employees are best asset and prefer to work 	Naturally expend effort when committed to goals
Trust	 Trusts of employees to use innovation and creativity to solve organizational problems Empowers employees 	Trust management to accurately determine long- term vision and strategy of organization
Leadership	 Realizes that all leadership functions must be distributed 	Lead and manage themselves if given the opportunity
Responsibility	Bestows responsibility for health of organization	 Accepts responsibility for organization health

Table 2. Theory Y Leadership Attitudes and Behaviors

The second prerequisite to distribution of power and authority in the leadership model concerns the dispersion of leadership competencies throughout the organization. In order for participative workgroups to successfully address the problems of management, Likert (1961) argues that the team and group members must engage in leadership activities. It logically follows that workgroups should have the leadership capabilities reflective of the five principle leadership competencies outlined in OPM's SES Qualification Guide (1997) and (described in Table 3). These include: (1) Managing and Balancing Change, (2) Empowering, Mentoring, Motivating, (3) Planning and Attaining Performance and Results, (4) Managing and Developing the Overall Enterprise, and (5) Establishing and Leading Teams. Since workgroups in a participative leadership system act somewhat independently to solve organizational problems, they must be able to lead themselves, establish their own milestones, develop their own methods, and be internally motivated. Management, therefore, must take steps to develop the leadership competencies/functions of its entire

Leadership Competency	Descriptions
Managing and Balancing Change	 Develop org vision integrating program goals, priorities, values Improve performance within existing org framework Motivate people to incorporate vision, planning, and quality into all org activities Being open to new ideas Displaying initiative, effort, and commitment
Empowering, Mentoring, Motivating	 Deploying strategies maximizing employee potential Fostering high ethical standards in meeting the organization's vision, mission, and goals Set the work force's expected performance levels Inspiring/motivating others toward org goal Sharing power and authority Assessing unique employee development needs, providing development opportunities, developing leadership through coaching and mentoring
Planning/Attaining Performance/Results	 Ability to make timely and effective decisions Ability at strategic planning, structuring and organizing work, setting priorities, Capable of performing risk analysis and mitigation, Setting program and performance standards Developing and marketing new products/services
Managing/ Developing the Enterprise	 Ability to acquire/administer human, financial, material, and information resources Assessing current and future staffing needs Overseeing/managing allocation of financial resources, budgetary process, and capital expenditures Ensuring efficient development and utilization of management, information systems, and other technological resources of the organization.
Establishing/Leading Coalitions and Teams	 Ability to negotiate with individuals and groups internally and externally Ability to develop an expansive professional network Developing and enhancing alliances with external groups and stakeholders Working in and fostering use of workgroups/teams Communicating the position and work of the organization clearly

Table 3. Leadership Functions

workforce and give leadership opportunities to people at all levels of the organization. Once there is confidence that people can responsibly perform the work of leadership at all levels of the organization, empowerment of employees to make organizational decisions can occur.

As stated above, adoption of Theory Y beliefs by management and development of leadership competencies among subordinates are two prerequisites necessary before a form of leadership reflecting greater distribution of power and authority can be enacted. As validated in Chapter II, the most effective form of leadership that uses greater empowerment of subordinates is based on use of workgroups. It is important to distinguish between true workgroups in the participative style and other efforts by groups of people within the organization. Participative workgroups, as defined by Likert (1961), embody the attributes contained in Table 4 below.

Workgroup Attribute	Description	
Decisions	 Through use of debate and equality of influence Occur in supportive atmosphere Consider specific goals and empowerment given by org 	
Membership and Teamwork	 Members and leaders have high degree of confidence, respect, and trust in one another Values and goals of members are the same Motivation of members is high Economic reward or promotion based on level of participation in achieving org goals skills Extensive cooperation and general leadership Members support needs of one another 	
Communication	 Extensive vertical and horizontal communication Communications are in interest of group, not individual Avoidance of communicating extraneous information Guidance from other workgroups constantly sought Interest in ideas and positions of other members Information is trusted Equal disposition between influencing and being influenced 	
Responsibility	All personnel feel responsible for attaining org goals	

Table 4. Participative Workgroup Characteristics

C. VALIDATION OF LEADERSHIP MODEL

The following tables are used to frame supporting elements for each leadership model component extracted from the case study analysis of Chapter III. As can be seen below in Table 5, each of the three cases contained substantial data supporting the relationships between the model elements. Specifically, evidence of Theory Y beliefs in management and deployment of leadership competencies by management across a widespread subset of subordinates was easily discernable in the case descriptions. Additionally, the use of workgroups to carry out problem solving and leadership responsibilities indicated that all three case subjects employed a participative leadership structure in the execution of their organizational transformation initiatives.

The successful adoption of Theory Y beliefs, engagement in activities that indicated management's willingness and confidence that leadership competencies were held by their workforces, and the distribution of power and authority in the form of workgroups are the three key indicators that, if true, validate the utility of the leadership model in implementing organizational change. In each of the experiences examined, Institutional Constancy at Naval Reactors; TQM implementation at the U.S. Coast Guard; and Business Process Transformation at the CIA, all three indications were present (Table 5).

Model Element	Naval Reactors	U.S. Coast Guard	CIA
Adopted Theory Y Traits?	Yes	Yes	Yes
Engaged in Activities that Demonstrated Distribution of Leadership Functions?	Yes	Yes	Yes
Employed Workgroups Demonstrating Distribution of Power and Authority?	Yes	Yes	Yes

Table 5. Summary of Case Study Evaluation

Tables 6, 7, and 8 provide detailed data supporting the evaluations made in Table 5.

Leadership Model Component	Case Analysis Findings and Observations
Theory Y Behavior (Philosophy)	 Management viewed employees as "primary asset" Employees expended great effort because of commitment to org goals (national defense) Key functions such as safety and quality entrusted by upper management to "line management" National defense and long term goals embraced by all people Every unit and individual has responsibilities that were "defined clearly and understood thoroughly" "Flat organizational structure" Individual components of org given freedom to engage in independent management and development Distribution of leadership functions across field activities, laboratories, contractors
Leadership Competency (Functions)	 Coalitions established and maintained with Navy, Department of Energy, Congress, environmental groups Detailed reviews of budgets used to gain program support Formal communication used to interface with outside groups Improvements in organization solicited from all personnel Forceful, decisive action taken to confront technical realities Use of simultaneously cooperative and competitive energies of redundant laboratories to enhance results Formal written goals established reflecting organizational mission, values, and vision Policies, Practices, Procedures driven by org goal of technical excellence "Cradle to grave" responsibility for all
Participative Workgroups (Form)	 Groups form to address problems, disband when complete Established formal, written goals incorporating org vision HQ and field activities interacted as one organization displaced by geography Cooperative teamwork employed between field activities, headquarters, and labs Documentation and communication of all actions from HQ and between field activities, contractors and HQ Use of special reporting systems to formally document problems and record solutions Technical excellence/responsibility instilled as "way of life" Promotions and reward based on defined traits that contribute towards goal of institutional constancy

Table 6. Naval Reactors: Validated Leadership Model Elements

Leadership Model Component	Case Analysis Findings and Observations
Theory Y Behavior (Philosophy)	 TQM implementation innovation encouraged by management Flexible implementation plan empowering employees to use innovation Subordinates expended great effort pursuing program goals Subordinates assigned to lead teams cross-functional teams Subordinates made decisions, guided upper management
Leadership Competency (Functions)	 Teams created vision statement, articulated desired future state Performance improvement sought under existing org structure and system while change effort executed Need for change vice superficial improvements recognized by managers and subordinates Training on TQM initiated to meet employees development needs, facilitate implementation TQM institute launched to maintain employee TQM competency Subordinates actively participated in TQM implementation at individual commands and at HQ Strategic planning, execution scheduling, resource management, and progress monitoring prevalent workgroups (implementation teams).
Participative Workgroups (Form))	 Groups formed to address implementation problems, disbanded when objectives is met Use of cross-functional QATs and "natural work groups" to address specific problems and improve processes Use of QMB to guide and align individual command's TQM efforts Implementation teams used to conduct strategic planning and execution for global org TQM effort Established formal, written goals incorporating org vision Groups and teams empowered to make critical decisions, without oversight by upper management Regular and recurring communication from management to subordinates, within and across teams and groups

Table 7. U.S. Coast Guard: Validated Leadership Model Elements

Leadership Model Component	Case Analysis Findings and Observations
Theory Y Behavior (Philosophy)	 Key efforts such as activity based costing entrusted to subordinates Responsibility for overall budget and health of organization bestowed on employees and other directorates Subordinates embraced org goals and exerted effort in support Employees used innovation and creativity in pursuing goals of the first pilot program, the LOC Leadership entrusted to and accepted by subordinates
Leadership Competency (Functions)	 Customer service and performance improvement within existing org framework balanced with change effort Vision and values incorporated into strategic planning New ideas incorporated into planning and execution Coalitions built with OMB, Congress, NSA, internal customers and partners New business sought outside organization with other agencies Stewardship of the organizations financial resources despite potential impacts to DA Individual teams exercised innovation in developing solutions
Participative Workgroups (Form)	 Regular communication between upper management and subordinates Other directorates empowered as participative workgroups through giveback program Use of empowered teams to develop solutions to org problems, such as activity based costing and business plans Principles and reasons for change effort communicated down through organization and across to other stakeholders Groups empowered to effect change in financial and administrative functions of organization Promotion of personnel based on belief in and support of organizational goals

Table 8. CIA: Validated Leadership Model Elements

D. CHAPTER SUMMARY

The case studies of three government organizations that successfully employed organizational change for improved performance yielded a wealth of information that supported applicability of a new leadership model. The model asserts that by management's adoption of leadership philosophy based on McGregor's Theory Y beliefs and the development and deployment of leadership functions throughout all subordinates, an environment conducive to distribution of organizational power and authority can be created. This environment provides the basic prerequisites needed to deploy cross-functional and self-directed workgroups that are empowered to enact change and entrusted with long-term health of the organization. The transformation experience of the three case subjects fit the leadership model developed in this chapter, however; by no means is this model exclusive. It is a general model that can be used by organizations to help plan their change efforts. For example, they can look to see whether their management has the right Leadership Philosophy and whether their workforce has adequately matured Leadership Functions prior to deploying empowered, self-sustaining workgroups. While not the only workable blueprint for deploying leadership in organization change, this new leadership model can be useful to other public institutions in planning their own transformation initiatives.

VI. CONCLUSION

A. SUMMARY

This research examined literature on change management and effective leadership, developed a leadership model that can be used by other government organizations as a blueprint for their own change effort, and validated that leadership model through case analysis of three public institutions that successfully implemented significant change. Implementing change in any organization for the purpose of improving performance or responding to environmental changes is extremely challenging. Government organizations in particular experience mixed success in such change efforts due to their firmly established work cultures, hierarchical management and chains of command, traditionally non-competitive business environment. This encapsulates the existing body of knowledge on organizational leadership and case analysis of a control group of government organizations into a simple, usable leadership model. While certainly not the only leadership model capable of guiding an organization through difficult transformation efforts, this thesis and the leadership model developed herein should yield benefits to other public firms through lessons learned and further comparative analyses of change efforts at the U.S. Naval Reactors Program, U.S. Coast Guard, and CIA.

The new leadership model incorporates three key leadership elements: philosophy, function, and form. It was shown in the leadership model that in order for organizations to deploy the most effective leadership form (participative workgroups), they must first satisfy the two pre-requisites. First, upper management must feel confident enough in their workforce to adopt Theory Y attitudes and behaviors. That is, a large degree of trust must be built between the people at the top of the organization and their subordinates. Management must believe that the people are the most important asset, that they choose to expend effort for the betterment of the organization, and that they can lead themselves if given the opportunity. The workforce must trust that their

management can accurately steer the organizations towards the correct long-term goals, must be accepting of responsibility and empowerment, and must take an overall responsibility for the health of the organization. After both management and the workforce adopt the above beliefs and attitudes, the leadership philosophy conducive to participative workgroups will be present.

In addition to a Theory Y based leadership philosophy, the model asserts that the five leadership functions should be present across a wide range of the workforce in order for participative workgroups to be effective. The ability to (1) manage and balance change, (2) empower, mentor, and motivate, (3) plan and attain results, (4) manage and develop the enterprise, and (5) establish and lead teams are all functions traditionally held by upper managers. For the participative system to be effective these leadership functions must be present, to some degree, in each member of each workgroup.

Once both model pre-requisites are satisfied, a ripe environment for power and authority distribution will be present in the organization. Recognition by upper management that the work of leadership cannot be effectively completed by those at the top of the traditional hierarchical management structure provides the impetus to deploy leadership responsibilities across and down through subordinates and the workforce. Couple this motivation with a leadership philosophy based on mutual trust and widespread presence of leadership functions and capabilities and the deployment of effective leadership forms, participative workgroups, will be possible.

B. CONCLUSIONS

The goal of this study as embodied by its primary research question was to identify how leadership should be employed in government organizations undergoing significant transformation initiatives designed to improve overall performance. Key elements of governmental organizational leadership during change were identified, a simple leadership relational model was developed, and validation of that leadership model was performed through review of literature and conduct of a multiple case study analysis. By answering the three

secondary research questions, this study effectively answered the primary research question. Answers to the secondary research questions are contained in Chapter V and are summarized below:

 What leadership philosophies are effective in guiding successful government organization transformations?

McGregor (1960) identified core Theory Y beliefs as an effective leadership philosophy. This philosophy centers around the belief that management and employees alike are motivated to see the organization succeed, responsible enough to be entrusted with the well being of the firm, and are innovative and creative in seeking solutions to the problems faced by the group.

 What are the functions of leadership in the transformational process of a government organization?

Key functions of leadership were summarized into five core leadership competencies derived from OPM's SES Qualification Guide (1997). The competencies included (1) Managing and Balancing Change, (2) Empowering, Mentoring, Motivating, (3) Planning and Attaining Performance and Results, (4) Managing and Developing the Overall Enterprise, and (5) Establishing and Leading Teams. These functions were determined to be critical skills and abilities for anyone charged with executing leadership responsibilities and duties, particularly during transformation periods.

 What forms of leadership have government organizations employed in transformation efforts?

Participative workgroups have been successfully employed as forms of leadership. Among the many traits of this leadership form, these workgroups make decisions through use of debate, have membership consisting of employees from all levels of the organization, extensively communicate vertically and horizontally across the organization, and take responsibility for attaining organizational, not individual, goals. Participative workgroup members are

capable of utilizing the leadership functions discussed above and are effective when utilized in conjunction with in Theory Y based leadership philosophy.

By answering the secondary research questions, this study provides information that should help NAVAIRNI 4.0 and other public organizations with the difficult task of effectively leading through periods of change. Understanding the relationship between the three supporting elements of leadership (philosophy, function, form) as outlined in the leadership model of Figure 3, improves the chance of meeting the challenges of changing business realities, increased competition, or other environmental shifts. This relationship between leadership philosophy, function, and form effectively answers the primary research question of this study.

It is important to understand that while the new model of leadership developed and discussed during this analysis is effective, it is not exclusive. It is important for every organization, public or private, to scan the available body of knowledge on the subject of organization change and leadership to determine what theories, models, or ideas best fit its needs. The infinite number of environments, conditions, or situations that are possible do not allow for the application of a single uniform model of leadership during change. Variables such as a unionized workforce, extremely short period available for change, or work encompassing classified material or high-level national security issues may prevent firms from employing the leadership model of this thesis in its exact form. Changes or adaptations to the model would need to be made in order to apply to each organization's reality, yet its basic tenets should still apply.

C. RECOMMENDED TOPICS FOR FUTURE RESEARCH

This research used a multiple case study analysis of government institutions to support theories and ideas on leadership during periods of organizational change. The following topics are areas that should be considered for future research on this subject.

- Compare the change experiences of government and private/commercial organizations. The leadership model developed in this thesis from literature used case analysis from three government organizations to validate each of the models supporting elements. Examining case studies from the commercial/private sector for evidence of leadership philosophies, functions, and forms may expand the model's applicability. This expansion of study may also show how the leadership model is not supported by the experiences of private organizations.
- Analyze firms that experience transformation failure. This study examined three cases of public firms that enjoyed success in their transformational efforts (as defined in Chapter III). A further examination of government firms that failed to attain change goals would provide valuable lessons learned on pitfalls to avoid. Determining how leadership philosophy, functions, or form differed with the ideas presented in this thesis could be helpful in identifying the most critical leadership factors in transformation success. This analysis can also be expanded to include private firms.
- Examine transformed firms that did not utilize philosophy, function, form consistent with those defined in leadership model. As mentioned in the conclusions above, there are other leadership models that can be successfully applied, depending on the situation faced by each firm. For example, use of a consultative leadership style is inconsistent with the leadership model (it favors a participative leadership style) yet the overwhelming majority of firms today fall into this category. Indeed, some firms can even be characterized as having a benevolent leadership style. Many of these forms have successfully completed true transformations and improved their performance. An examination of these firms will help identify factors

- for their success, which may or may not have a relationship with the type of leadership utilized.
- Evaluate non-governmental organizations (NGO) that do not have steep hierarchies or military background. The three cases examined in this thesis were all government organizations that utilized a military or other steeply hierarchical chain of command. Deployment of participative workgroups in these organizations ran counter to the culture of command and control present in each. Energy and effort during their transformation efforts were expended to ensure that the new leadership structures meshed with the legacy command structure still required. NGOs that do not operate for profit and that have flatter command structures may enjoy significantly more success in change efforts because more organizational energy can be exerted on the problems faced by the firm. A study comparing the change experiences of these two types of organizations may provide data on the true potential of participative workgroups as a leadership form.
- Independently evaluate the individual supporting elements of the leadership model presented in this thesis. A deeper examination of the leadership philosophy, functions, or forms employed by successfully transformed forms may provide additional data on the weighting of importance for each. This could be helpful in the prioritization efforts to deploy the leadership model.

Successfully navigating any organization through a major period of change is an extremely difficult challenge for management to meet. Government organizations with their entrenched work cultures, deeply regulated workplaces, and historically stable missions have found the task of change management particularly difficult. Without many past efforts from which to draw experiences, leadership of public firms that encounter an imperative for change can struggle to develop change strategies. As an alternative to actual change management

experience, this thesis provides government organizations with (1) specific lessons learned from the Naval Reactors, the US Coast Guard, and the CIA, and (2) a leadership model to employ in their own effort. A third and arguably most important development of this study is the multiple case analysis process used to evaluate the experiences of other government organizations. This process can be duplicated for the recommended topics of research above or with any number or combination of case subjects. It is the utility of this process that provides other organizations with a valuable tool that can be used to analyze their own situations, strategies, and experiences.

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APPENDIX A: INSTITUTIONAL CONSTANCY AT NAVAL REACTORS

A. BACKGROUND

The following text is an excerpt from "Institutional Constancy at Naval Reactors" authored by John W. Crawford and Steven L. Krahn (1998).

B. THE NAVAL NUCLEAR PROPULSION PROGRAM: A BRIEF CASE STUDY IN INSTITUTIONAL CONSTANCY

1. Introduction

Institutional constancy is a concept that has been proposed to help explain how, given the close scrutiny that now pertains to such activities, organizations can effectively manage large technical systems that involve hazardous materials with potentially significant long-term consequences. One organization that has effectively managed within such an environment for almost 50 years is the Naval Nuclear Propulsion Program.

The program's management methods involve careful organization, meticulous program execution, the achievement of technical excellence, close management of program and contractor personnel assets, and effective communications. The attributes of the Naval Nuclear Propulsion Program compare well to those that have been ascribed to organizations that exhibit institutional constancy. The program demonstrates both trustworthiness and the capacity to enact programs. The program's consistent emphasis on the technical competence of its personnel is a distinctive feature.

The opinions expressed herein are those of the authors. They do not represent the views of either the Naval Nuclear Propulsion Directorate or those of the Defense Nuclear Facilities Safety Board.

In an article published in the November/December 1996 issue of Public Administration Review, LaPorte and Keller argued that the management of large organizations that deal with hazardous materials (materials that pose significant risks over long periods) presented "extraordinary challenges for public

institutions." They postulated that, in our society, such organizations are "pressed to operate at nearly fault-free levels" in order to remain viable. LaPorte and Keller went on to describe a concept they called "institutional constancy." They argued that such constancy is a necessary (but not sufficient) attribute of organizations, if they wish to achieve public acceptance in their operations with hazardous materials.

LaPorte and Keller describe institutional constancy from a number of perspectives: the perceived need for it, the barriers to achieving it, and an outline of the matters that must be attended to if institutional constancy is to be achieved. In suggesting further paths for research, LaPorte and Keller urge that case studies be developed that examine "the characteristics and experiences of institutions" that have achieved a degree of institutional constancy. They mention a number of organizations that, based on externally available information, appear to meet their criteria for institutional constancy. One of these organizations is the Naval Nuclear Propulsion Program.

The authors concur that much can be learned regarding institutional constancy by reviewing the history, organization, and management of such organizations as the Naval Nuclear Propulsion Program (or Naval Reactors, as it is more commonly known). This program is responsible for the design, construction, operation, maintenance, and decommissioning of the nuclear power plants that propel approximately 40 percent of the major combatant ships of the U.S. Navy. As such, Naval Reactors has managed the building and operation of approximately 240 nuclear reactors and, importantly in today's environment, safety and responsibly decommissioned more than 50 of these reactors and their associated equipment. Since the organization has safely and effectively dealt with the hazards associated with nuclear power for almost 50 years, it seems appropriate to evaluate some of the reasons for that success.

In the following discussion, Naval Reactors will first be described from an insider's perspective, that is, discussed in terms that the program (and its chroniclers) have employed. This description is intended to provide a "feel" for

the program. The attributes that emerge during this discussion will then be compared to the basic structure of institutional constancy described by LaPorte and Keller.

2. Inside Naval Reactors

Naval Reactors is a joint program of the Navy and the Department of Energy. The need for a joint effort stems from the fact that the Department of Energy is the only government agency empowered by law to conduct research and development on power reactors. In basic terms, the Navy defines the required features of the nuclear power plants; the Department of Energy develops and tests the plants to ensure that they meet the requirements. The Navy builds, operates, and decommissions the shipboard plants, and then turns the decommissioned reactor plants over to other organizations within the Department of Energy for burial.

Very early in the development of naval nuclear power, H. G. Rickover, then a Navy captain, saw that this statutory division of responsibilities posed grave difficulties. He recognized that the development and utilization of this revolutionary new source of power should be treated as a series of closely related technical functions including research and development, detailed design, procurement of apparatus, maintenance and repair of equipment, and selection and training of personnel. With these considerations in mind, Rickover moved boldly and with remarkable political astuteness to arrange that a single organization be assigned the key responsibilities of both the Navy and the Atomic Energy Commission (the Department of Energy's predecessor).

There were imposing barriers to such an arrangement. Rickover had to overcome inertia and active resistance within both the Atomic Energy Commission and the Navy. For example, the Atomic Energy Commission was preoccupied with the development and manufacture of nuclear weapons; however, for its early research and development, Naval Reactors had to rely on the national laboratories of the Atomic Energy Commission. The Navy, for its part, would have preferred to fit the nuclear submarine program into its well-

established organizational structures and methods of designing and constructing ships, rather than experiment with this radical joint organization with the Atomic Energy Commission.

Rickover overcame these impediments, and more, by working at the top of both organizations. He first garnered the support of the Chief of Naval Operations for the concept of a nuclear-powered submarine and elicited a memo from him directing the Navy's ship design agency to undertake such an effort jointly with the Atomic Energy Commission. Rickover then inveigled the Bureau of Ships to assign him the responsibility of negotiating an agreement with the Atomic Energy Commission. When the dust settled, Rickover was the only person with feet solidly planted in both camps, and he was named director of the program. As a top priority, he set about quickly to establish a strong and enduring relationship with Congress, specifically the Joint Committee on Atomic Energy, which had comprehensive oversight of all nuclear matters during that era. It was, however, a consistent string of design and operational successes that solidified Naval Reactors' relationship with Congress. It is a relationship that served the program well and endures to this day.

In parallel with these political maneuverings, Rickover worked to impart his vision and inculcate his principles and standards of excellence in every facet of Naval Reactors. He did so in a way that ensured success during his own tenure as director of the program (from its inception through 1982), and in a way that laid the foundation for enduring success. To appreciate the magnitude of this technical undertaking and the managerial tour de force that it involved, one needs to understand where Rickover began. When he started, no reactor designed for useful amounts of power production had ever been built. Yet he undertook to build one immediately for the extraordinarily difficult application of submarine propulsion. It was an immensely inspiring vision, one that both motivated his organization and ensured success in selling its program. achieving success, he and his organization scored an engineering accomplishment of historic magnitude.

To understand how Rickover accomplished all of this requires that one become acquainted with his principles and methods of organization, program execution, the achievement of technical excellence, the management of personnel and other resources, and the ensuring of effective communications. These were the ingredients of his success; they offer valuable lessons for other hazardous, technically complex programs that wish to have enduring success.

3. Organization

The Naval Reactors organization embodies a number of basic principles of sound management, which are all too often "more honor'd in the breach than in the observance." The unique strength of Naval Reactors has been that these principles are applied throughout the program logically and consistently with unremitting rigor.

A principle of transcending importance is that every organizational unit and each individual has responsibilities that are defined clearly and understood thoroughly. Careful attention is given to seeing that these responsibilities are internalized, that the name of an individual is identified unambiguously with each required function, and that these responsibilities are put in writing. Naval Reactors policy and practice gives emphasis to this principle to a degree matched by few organizations.

Assigning responsibilities with this IIS Stark clarity presupposes that there exists a dear definition of the respective responsibilities for the organizations involved, notably the government and its contractors. The cardinal principle applied by Naval Reactors is that the government itself is the customer-and an exacting one at that-for each and every activity and function that contractors are engaged to perform. The contractor is required to meet the requirements of the contract in all respects. Naval Reactors built up an outstanding technical staff (discussed further below) to ensure that it could perform as a "demanding customer." However, it is clear Naval Reactors policy that the competence of the Naval Reactors staff is not to be used to compensate for weaknesses in the capabilities of the contractor but rather to cause them to be corrected. Few

policies are more central to the success of the program than maintaining this clear distinction between the roles of the government and the contractors.

As noted earlier, a single unified organization was established to carry out the respective responsibilities of the Atomic Energy Commission and the Navy. This unified aspect was strengthened as the program grew and the organization was extended nationwide. The heads of each field activity in the Naval Reactors program reported to the director rather than to some key assistant. This arrangement produces a very flat organization; at times more than 20 people report directly to the director. In such an organization communications are very important (as discussed below). The mode of operation is highly unified, yet flexible; new groups are formed and old ones disbanded based on the demands of the work. Ultimate authority and responsibility resides with the director, who delegates appropriate authority to headquarters and field personnel. Field personnel truly function as a part of the headquarters organization, simply displaced by geography.

This close-knit style of organization enhances program unity and helps ensure uniform application of policies, standards, and practices. Unity is also fostered by the practice of staffing senior field positions from among those who have demonstrated effectiveness at headquarters. Finally, this unified organizational structure helps to suppress factions and avoid the tensions and conflicts between headquarters and field organizations that all too often hamper the progress of large, technically-complex, hazardous endeavors.

4. Program Execution

A salient feature of program execution at Naval Reactors is the willingness to face facts squarely and objectively, especially those concerning technical matters. Central to this approach is the Rickover philosophy that "technology had imperatives of its own," based on immutable laws of nature, to which deference must always be paid. These laws cannot be challenged with impunity; yet all too often, otherwise capable managers, whether from lack of technical knowledge, contractual incentives, or personal ambition, imagine that they can do so. With

his many years of engineering and program management experience, Rickover was especially vigilant to detect and counter these tendencies.

His effective transmission of this experience to the Naval Reactors organization has been a major factor in its success. For example, at a perilously late stage in the development of the programs first reactor (the prototype for the first nuclear submarine, Nautilus) Rickover made the contractor scrap a fatally flawed design for a vital safety system and instead manufacture a totally new, simpler design. His courage to face technical reality and take forceful action helped foster an organizational commitment to confront technical reality in all its details early and head on whatever the consequences. This became a characteristic mode of operation at Naval Reactors and it works to avoid potential failure to meet agreed-upon program objectives, especially in safety and quality.

Significant attention is always given to assigning work consistent with priorities. For example, at a crucial stage in the program, during a burgeoning nuclear shipbuilding program, one of the corporations involved decided to do a study for a new design of a reactor plant for destroyers. Over Rickover's objections, the firm was awarded a large contract to study its radical design concept. Two years later, the firm issued a report urging that a major program be undertaken. To avoid having resources diverted from building up the nuclear fleet, Rickover dedicated a team of his top engineers to develop a report for the Atomic Energy Commission that technically demolished the proposed reactor design. The destroyer reactor project based on the discredited technology was never advanced again.

The engineers at Naval Reactors who were involved complained that they had been diverted from higher priority work to scotch this effort; Rickover convinced them that a high visibility failure (as this concept would have proven to be) would have had adverse impacts on the industry in general, and on naval nuclear power in particular. Rickover always awarded high priority to protecting the program. It remains a high program priority today.

Another distinguishing feature of Naval Reactors is that operations are conducted with a high degree of formality and are rigorously documented. All work is conducted with a disciplined engineering approach, making full use of available program and consensus standards. The all too common "laissez faire" approach, in which an individual or organization, however well qualified, is allowed to conduct work without due attention to sound engineering principles and independent checks, is simply not tolerated. This disciplined, formal engineering approach is pervasive in every phase of activities at Naval Reactors: development of codes and standards where none exist, the availability of formalized design manuals and engineered test procedures, the detailed analysis of proposed designs, and the rigorous application of quality assurance, to name a few. Some individuals may find this rigor irksome when they first encounter it. However, over the years, a comprehensive set of standards and procedures has been developed that has contributed importantly to the safety and reliability of the reactor plants that Naval Reactors builds. This set of standards and procedures permits innovation to be applied in a controlled manner and allows focus to be placed on truly important areas, while ensuring that routine work gets done competently.

Program execution is strongly marked by the application of the principle of redundancy. The objective is never to be dependent on a single source of anything: information, supply of material and equipment, design approaches, assessment of quality, or personnel. The list could extend indefinitely. Application of this principle can be seen in the early establishment of two reactor plant-engineering laboratories. The strong, competitive capabilities of these two laboratories have been an important source of strength for the Naval Reactors program, and the laboratories are often used cooperatively to address technical problems of common program interest.

5. Achieving Technical Excellence

Achieving technical excellence in design and execution is perhaps the supreme objective that informs and drives all Naval Reactors activities. All

policies, practices, and procedures are directed toward achieving this objective. Achieving it requires that personnel acquire the disposition-as a way of life-to examine matters in detail with an attitude of objectivity concerning assumptions, validity of data, and the like, coupled with an imaginative conjecture of how things could possibly conspire to go wrong. Development of this disposition complements the disposition mentioned earlier of giving due regard to the laws of nature. It is tested most when careful analysis discloses flaws that might compromise excellence and therefore require adopting new approaches, even though such a change may sometimes threaten cost and schedules.

Another key way of achieving excellence is through effective use of consensus engineering codes and standards. In principle, this is not unusual. What was unusual in the early days of Naval Reactors was the technical thoroughness and managerial force with which the program applied the principle. Since there were few standards specific to the newly born nuclear power industry, Naval Reactors examined and upgraded applicable standards from conventional power plant practice and submarine design.

Where no standards were available or suitable for use, Naval Reactors developed its own standards and continually upgraded them as the program accumulated experience.

Yet another obstacle had to be overcome in the early days of the program -unsound notions of the role of research and development in mission-oriented endeavors. The Naval Reactors view was that research and development work funded by the program had to contribute directly to program objectives. A different view, encountered frequently at the time in the national laboratories of the Atomic Energy Commission, was that scientists and engineers ought to be funded on the basis of competence and be allowed substantial latitude in the choice of problems to be addressed and methods used. Such an attitude did not support the high national priority Rickover perceived for the nuclear submarine project. In addition the anticipated need for substantial industrial experience for the actual shipbuilding programs caused Naval Reactors to establish its own

laboratory structure dedicated to naval reactor applications, run by industrial giants (Westinghouse and General Electric), and operated under close Naval Reactors supervision and guidance.

The technical excellence sought in the Naval Reactors program is embodied in the high quality reliability, and safety of the components, systems, and plants that it produces. In achieving this result, Naval Reactors makes wide use of quality assurance, but it does so in a manner that preserves to line management the final responsibility for quality. It emphatically does not tolerate the aberrant and harmful interpretation that "the quality department is responsible for quality"; its proper responsibility is to confirm that quality is achieved.

6. Asset Management

Naval Reactors views its personnel, both government and contractor, as its primary asset. Obviously, all program personnel must be fully competent, especially concerning technical qualifications. Naval Reactors must have the competence, in all areas, to provide effective technical direction and guidance. Selection and training of Naval Reactors personnel is thus accorded the highest priority among all program endeavors. Similarly, Naval Reactors continually evaluates the technical competence of its contractors to ensure that it is sufficient to a very demanding task.

To meet its own needs for personnel Naval Reactors has drawn on many existing sources and developed others tailored to its needs. Initially, large numbers were drawn from among naval officers with advanced technical education who had specialized in engineering. As this source dwindled, cadres of gifted graduates of the Naval Reserve Officer Training Corps (NROTC) at colleges and universities were selected and given advanced engineering education at the Bettis Reactor Engineering School, established by Naval Reactors at the Bettis Atomic Power Laboratory.

As needs continued to mount, additional programs were developed to harvest talent available from other sources such as other college graduates and graduates of other Navy programs. It came to be recognized that the essential

approach was to cast a wide net to attract individuals of outstanding technical and managerial capability early on and then educate and train them further in the task of working on nuclear power. It has been a highly successful approach, and indeed, is considered one of the hallmarks of the Naval Reactors program.

After suitable candidates are identified, utmost attention is given to the selection process. Each candidate is interviewed by at least three senior technical managers, personnel whose judgment is trusted by the director. The attributes sought include: technical ability, mental alertness, industry, imagination, dedication, moral integrity, and growth potential. In trying to gauge technical ability, the interviewers attempt to "get behind the grades" to understand the candidates' ability to apply the material they have learned in a logical, coherent fashion. The capstone of the process is an interview with the director, who, provided with the results of previous interviews, makes the final determination.

These two approaches, casting a wide net to garner the best qualified candidates, and a rigorous, comprehensive interview process, ensure a steady stream of well-qualified personnel into the nuclear fleet and Naval Reactors' technical staff Regular, detailed reviews of long-term performance ensure that only top performers move into positions of responsibility. In the fleet, major "checkpoints" occur when mid-career officers cycle back through Naval Reactors headquarters to qualify as engineering department heads. Senior officers run the qualification gauntlet again prior to achieving command of a nuclear ship. At Naval Reactors headquarters, young engineers are rigorously reviewed prior to being granted "signature authority" (authorizing them to sign contractually binding correspondence for the director). They are reviewed again when their initial four to five year tour at Naval Reactors is complete, at which point the program determines whether or not to offer them a permanent job.

This approach to meeting personnel needs-wide recruitment, rigorous screening, and regular, comprehensive reviews is not unique to Naval Reactors; in fact, other institutions of long standing, such as the U. S. Marine Corps and a

number of religious orders, focus similarly on "growing their own" talent. Institutions that endure share with Naval Reactors the attribute of consistent attention to the development of their personnel. This attribute enables them to adapt to an ever-changing environment.

Acquisition of the Naval Reactors customer capability is the sine qua non of achieving the needed level of contractor capability. The two phenomena may seem unrelated at first; however, it is Naval Reactors' experience that contractor performance will only be as capable as a capable customer makes it be. The contractor is often obliged to distribute top technical talent, always in short supply, among many projects and programs. The consistently demanding customer is the one most likely to have the needs of its program met. Few can match Naval Reactors in this category.

When a contractor has been able to acquire the strong capability needed to perform well, often with considerable difficulty, it is tempted to reassign these newly found strong performers to other corporate needs. Naval Reactors has always exercised consistent vigilance to assure that its programs are not misused in this manner. Generally, Naval Reactors uses its contractual vehicles, in concert with other less formal mechanisms, as strong incentives against such corporate actions, but these incentives do not develop automatically.

7. Communications

The final component to the Naval Reactors structure-the one, which ties the program together-is communications. The communication system is based on effective and thorough internal communication, which lays a solid foundation for building communication links to outside groups.

Keeping up with what is going on in nationwide programs such as Naval Reactors has always been daunting. The comprehensive approach taken is characteristic of the program. Each top manager in the field, both government and contractor, is required to write the director of the program a weekly report (headquarters personnel are clearly at the call of the director whenever reports are required). This report is expected to be concise, but care is taken to describe

each problem adequately, to assign a responsible individual, and to provide a schedule for updates and resolution. For fast-breaking issues these reports are often followed up with phone calls to the director.

Due to the broad responsibilities assigned personnel in the program, the director often receives reports of the same problem from several perspectives; this ensures that Naval Reactors receives complementary, independent reports on vital issues.

Communications do not just move up the chain of command. In keeping with Naval Reactor's commitment to formality, all actions taken by headquarters are promptly documented and communicated to all activities involved. This provides the basis for an ongoing dialogue between Naval Reactors headquarters, its field offices, and its contractors. Communications in writing, coupled with the formal proposals required by Naval Reactors of its contractors, provide a clear written record of the actions and decisions of the program. This permits effective interfacing with outside groups, whether they are auditors (e.g., the General Accounting Office) or they provide oversight (e.g., the Advisory Committee on Reactor Safeguards, an arm of the Nuclear Regulatory Commission and even more notably, Congress).

Naval Reactors provides an annual review of its operations to Congress along with its budget submittal. This review goes into great depth regarding the health and safety record of the program; a summary version of this report (known as the Grey Book) is also updated annually. These comprehensive reports, coupled with regular, effective congressional testimony, are very valuable in marshaling support for Naval Reactors programs.

8. Naval Reactors and Institutional Constancy

LaPorte and Keller postulate two major avenues by which organizations build institutional constancy. First, they demonstrate that they are worthy of trust, and second, they develop and demonstrate the capacity to execute the programs entrusted to them. The following sections will describe how the attributes of the Naval Reactors program contribute to achieving these two ends.

9. Demonstrating Trustworthiness

The attributes that LaPorte and Keller delineate under this category include: (1) the development and implementation of formal written goals, (2) the strong articulation of a commitment to constancy, (3) the fostering of strong institutional norms and processes, and (4) the presence of vigorous external enforcement or oversight.

Formal, written goals have been the backbone of the Naval Reactors program since its inception. A formal, written goal (the commitment to produce a nuclear reactor for submarine propulsion) launched the program in the late 1940s. Prior to that no firm foothold could be found for the program. From that basic goal a number of subsidiary goals were derived that further defined the design requirements of the submarine propulsion plant. Other written goals followed, many having to do with public health and safety, such as a goal of "no significant discharges of radioactivity to the environment," and other similar technical challenges.

The Naval Reactors program embodies its commitment to constancy in a philosophy of operations. Since its very early stages the program has espoused a "cradle to grave responsibility" for the nuclear power plants that it designs and builds. In effect, such a philosophy operationalizes constancy, which is put to work in concepts such as responsibility, as well as in the clear definition pf roles, and the need for technical excellence in all aspects of the program.

Even very visible advertisement of the goals and objectives of the program is not enough, however, as LaPorte and Keller point out. These goals and objectives must be supported by institutional norms and formal internal processes. Naval Reactors ensures that its goals and objectives are put into practice through a number of program attributes.

First, the program inculcates the norm of personal responsibility; each member of the program is personally responsible for the work he or she performs. Second, the program ensures that the cutting edge of program management, the field element managers, have first been successful in headquarters assignments. Their track records make it possible for

headquarters to delegate wide latitude to them once they are in the field. A third institutional norm or set of norms concerns the manner in which the technical work of the program is performed. Such norms include attention to detail, adherence to consensus and program standards, and a dedication to technical inquisitiveness and appropriate research and development. These program norms and processes help to ensure that program objectives are met.

Naval Reactors was born in an age where there was less focus than today However, from the very early days the program on external regulation. recognized the value that could be provided by external review of its design and Under the aegis first of the Atomic Energy Commission and practices. subsequently the Department of Energy, the reactor plant designs for each class of ships are reviewed by the Advisory Committee on Reactor Safeguards. Comments received from the committee, although not mandatory for the program, are treated seriously and are resolved prior to design acceptance. In the early years of the program close congressional scrutiny was provided by the Joint Committee on Atomic Energy. This powerful committee was responsible for all nuclear matters until the early 1970s and it provided detailed oversight of the program. The format and content of Naval Reactor's testimony to Congress was developed in those early days of detailed scrutiny and endures to this day. Thus, significant external oversight of nuclear safety in the program exists, although it is not as formal as it is in some programs.

In addition, since the mid-1980s, Naval Reactors has opened its program to external oversight of environmental matters. Naval Reactors has dedicated a separate division to deal with environmental protection and compliance matters. This division, working closely with Naval Reactors ' contractors, ensures that environmental problems are rapidly identified and corrected. This rapid response has led to good working relationships between Naval Reactors and state and federal regulators in this arena.

10. Agency Capacity to Enact Programs

In describing the conditions necessary to ensure that agencies have the capacity to enact their programs, LaPorte and Keller cite three major attributes. These attributes are: (1) adequate administrative and technical capability to assure performance, (2) analytical supports that incorporate the interests of the future, and (3) effective capacity to detect and remedy failures early on. How the Naval Reactors program achieves each of these attributes is discussed below.

A critical foundation for the program's infrastructure is its ability to establish, define, and protect a domain that encompasses its responsibilities totally This was never easy to do. From the outset of the Naval Reactors program, the Atomic Energy Commission (now the Department of Energy), the Navy, and other organizations made repeated attempts to curtail or modify those responsibilities. Naval Reactor's policy has been to defend its domain vigilantly against such intrusions. Its effective protection of its prerogatives gives it the freedom to meet its programmatic goals and responsibilities and prevents its energy from being sapped on unnecessary squabbles.

Naval Reactor's ability to define and maintain the boundaries of its program is best illustrated in its establishment and maintenance of control of the selection, education, and training of program personnel. Personnel have always been an issue of major importance to the Navy. Rickover and later directors have insisted that they be the final arbiters of an officer's acceptability for technical or operational duty, and that the decision be based (in key part) on a personal interview with the director. The Navy blanched at placing such authority with a single individual; however, Naval Reactors sustained its position based on the issue of nuclear safety and the personal responsibility for safety that the Director has demonstrated.

Naval Reactors ability to enact its programs is further enhanced by its unity as an organization. This unity renders it relatively immune to the conflicts that have beset other programs, especially the tensions between headquarters and field organizations. Naval Reactors managers are imbued with the feeling of being part of a unified organization, one with dear management policies and

practices and well-articulated goals. This organizational cohesion is not stultifying; all are encouraged to recommend improvements, organizational and technical, confident that optimal solutions will emerge from such ongoing dialogues.

Few aspects of Naval Reactors activities are more essential to enacting programs effectively, especially programs associated with hazardous materials, than the formal measures used to execute them. These measures, which apply to each stage of the program from design through decommissioning, have been developed to meet specific needs and are progressively strengthened, incorporating experience as the program progresses. As with other Naval Reactors management methods, the use of disciplined formal methods is not new; however, the thoroughness and discipline with which the concept is applied throughout the program is rarely found elsewhere.

Important as the development of formal systems is, the success of such systems depends on their discerning use by contractor and Naval Reactors personnel. Thus, selection of such personnel is accorded the highest priority among all activities. The policy is to pick the brightest, best educated, and most accomplished, and then to give them the best nuclear education and training that can be found or developed within the program. Attention is then paid to personnel development, ensuring that staff members receive assignments of progressively increasing responsibility and also that the more pedestrian performers are screened out.

It is in the strength of its personnel, at all levels, that Naval Reactors differs most from other government organizations. The strength of Naval Reactor's personnel supports another fundamental premise of the program: that Naval Reactors has technical and managerial capability at least equal to that of its contractors. Otherwise, Naval Reactors could not reasonably expect to provide contractors with meaningful technical and programmatic direction or act as a

demanding customer in reviewing products delivered. Because of the safety implications of the work performed, contractor personnel have to be among the very best.

Another distinguishing feature of Naval Reactors is the depth to which it manages its contractor. Naval Reactors considers the acquisition and maintenance of technical competence on the part of contractors a contractual obligation. It has established adequate contractual structures and, more importantly, strong, enduring relationships with its contractors to ensure that contractual obligations are met.

A principle paradigm of the Naval Reactors program, one that contributes to the program's "future focus," has been the aforementioned "cradle to grave" responsibility that it maintains for the nuclear power plants under its purview. This understanding of the long-term responsibility associated with using radioactive materials, coupled with the program's commitment to clearly delineated and documented roles and responsibilities, has provided the necessary emphasis on responsible, forward-looking technical decision making. It has also led to outstanding performance in the areas of environment, safety, and health, as documented by recent independent assessments.

The extensive internal communication system that Naval Reactors has in place also ensures that it is very responsive to problems as they arise. In addition to the management reports discussed above, several special reporting systems exist to document quality problems and unusual occurrences as well as to record changes required in the formal system of manuals and procedures that establish program requirements. All of these systems require formal, technical resolution of the problems identified and appropriate, authoritative approval of problem resolutions.

11. Challenges to the System

The systems put in place by Naval Reactors worked well the vast majority of the time. However, that does not mean that the perturbations to these

systems did not happen-they did. Naval Reactors' responses to three systematic challenges are described below in an effort to further explicate important aspects of the Naval Reactors program.

Naval Reactors ' attention to personnel matters does not mean that no "turkeys" ever slip through. In fact, roughly 10 percent of those brought in for training fail, mostly for academic reasons-this is one of the functions of the rigorous, phased training program that Naval Reactors uses. However, each problem case is handled individually, and the causes are thoroughly researched. Often, extensive remediation efforts are attempted, and no naval officer (or for that matter, civilian engineer) is dropped from the program without the personal, written approval of the director.

Perhaps at no time are programs and their systems tested more severely than during disasters; Naval Reactors went through one such searching period when the nuclear submarine Thresher was lost at sea in 1963. Towards the end of the Navy's investigation of that tragedy, a senior naval officer questioned whether the rigorous, detailed procedures that were used to operate the reactor might not have impeded the doomed ship's ability to re-establish propulsion as the submarine sank. Rickover reacted to this stimulus immediately and characteristically. He responded on two fronts. First, he had his engineers review the existing Navy technical analysis of the incident. They detected significant discrepancies and were able to exonerate the reactor from potential blame.

However, Naval Reactors did not stop there, it accelerated an already existing program to simplify reactor startup procedures. By the time Rickover was asked to respond to the Joint Committee on Atomic Energy, he was armed with revised technical analyses and a forward-looking corrective action program.

The ultimate test of the system Rickover built came in 1982, when "The Admiral" was involuntarily retired for "actuarial reasons"-he had just turned 82. How would the program change? The answer? Very little.

Given the difficulty that most organizations go through in making the transition from a charismatic leader such as Rickover, how was it accomplished? The answer to this question harkens back to one of the fundamental tenets of the Naval Reactors program –formality. The well-established standards that existed the design, construction, operation, pertaining to maintenance, decommissioning of reactors remained in effect and continued to guide the technical work of the program. Also, agreements were reached between the program (supported by its allies in Congress) and the White House to codify the management arrangements between Naval Reactors and the Navy and the Department of Energy By and large, Rickover's personal boundary management efforts had maintained these arrangements previously. Now they were based on Executive Order 12344 (which was later superseded by statute).

12. Conclusion

We believe that the Naval Reactors program comports well with the programmatic attributes that LaPorte and Keller deem necessary for institutional constancy. Review of the program's response to several systematic challenges provides additional support to this conclusion. It is clear that some attributes are addressed more strongly than others, as will be discussed briefly below.

In the area of demonstrating trustworthiness, Naval Reactors places particular emphasis on formal, written goals and a strong articulation of those goals. One of these goals, cradle to grave responsibility for its nuclear power plants, also helps produce the necessary commitment to constancy. Due to the program's outstanding safety record, it has yet to be subjected to formal external oversight or regulation of nuclear safety; however, it does submit its reactor plant designs to the Advisory Committee on Reactor Safeguards for review and is subject to regulation in environmental matters.

Naval Reactors has placed its major emphasis in the area of developing agency capacity to perform. Primary program focus is applied to developing and maintaining the capability to execute programmatic goals. The major source of such capability is the truly outstanding men and women, both government and

contractor, who have been attracted to the program. It is their acumen and commitment that makes the error detection capability of the program so responsive and ensures that the program is always looking to the future.

It is the view of the authors that the importance placed on the selection, education, and training of personnel, and their subsequent retention in an organization, is of preeminent importance to government organizations trying to exhibit institutional constancy. By carefully screening its personnel, developing their capabilities, and ensuring that they continue to have meaningful work, Naval Reactors has performed well in this area, to date. This capability has been aided by the program's relative autonomy, which has been aggressively defended. Such autonomy permits constancy of purpose (George, 1995). It is in their personnel that government organizations develop their capacity to excel and achieve enduring success.

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APPENDIX B: TQM IMPLEMENTATION AT THE U.S. COAST GUARD

A. BACKGROUND

The following text is an excerpt from "An Organizational Sea Change: Total Quality Management in the Coast Guard" authored by Susan Rosegrant (1993).

B. AN ORGANIZATION SEA CHANGE: TOTAL QUALITY MANAGEMENT IN THE US COAST GUARD

1. Introduction

In the late fall of 1992, Admiral J. William Kime, the commandant of the US Coast Guard, issued a challenge to the agency's almost 40,000 military and civilian personnel. Two years earlier, he had launched the most sweeping cultural change in the Coast Guard's 200-year history, declaring that the smallest of the five armed forces would embrace and implement Total Quality Management (TQM), a management approach that encourages a methodical and on-going self-analysis of organizational processes at all levels. Now, Kime declared, the Coast Guard was at a "critical juncture." In order for TQM to succeed, the organization needed to work harder, to focus its improvement efforts, and to begin to institutionalize quality principles in the Coast Guard culture.

The early implementation already had been a formidable, and sometimes hectic, process. Specially chartered TQM teams had created a Coast Guard vision; laid out a two-year plan; established a management structure to oversee and execute TQM goals and activities; and founded an internal TQM training center. Admiral Kime had traveled widely throughout the agency, preaching the benefits of the management approach to groups ranging from district office staffs to field units stationed on high-powered cutters. In addition, an outside consultant had helped train the top five percent of the Coast Guard in the principles and goals of TQM.

But with all that had been accomplished, Kime knew that the real test of the program lay in the organization's ability to surmount the challenges that still lay ahead. Now more than halfway through his four-year tenure, the commandant was determined to see TQM solidly entrenched in the Coast Guard before his time ran out. "This third year will be critical to our success," Admiral Kime predicted, calling on the entire agency to unite behind his goal. "We must maintain the momentum. In fact, we must move forward aggressively with TQM."

2. Forces for Change

When Admiral Kime became commandant on May 31, 1990, he soon become convinced that implementing TQM would benefit the agency in several important ways. The management philosophy, based on the ideas of such quality gurus as W. Edwards Deming, Joseph Juran, Armand Feigenbaum, and Kaoru Ishikawa, had already been embraced by a broad cross-section of American corporations. Now a growing number of federal agencies, including the US Navy, were trying TQM. Although the specific approaches varied, TQM programs shared the common components of continuous process improvement, people orientation, quantitative methods, and customer focus. Organizations that had implemented TQM successfully often reported dramatic overall quality improvements in the goods or services they provided; flatter, less hierarchical, and more efficient management structures; an increase in teamwork and cooperation; and more "empowered" employees, capable of handling new responsibilities and actively contributing to the realization of organizational goals. "We seemed to fit the mold of the type of organization that should be looking towards TQM," Kime explained.

Indeed, the Coast Guard appeared to need a new way to respond to an increasing assortment of pressures to change. The service's missions had expanded dramatically during its 200 years as the agency with primary maritime authority for the United States. Its traditional duties had remained intact, such as regulating commercial vessels; conducting search and rescue missions at sea; maintaining lighthouses and other navigational aids; and staying ready to assist

as an armed, naval force. But the Coast Guard had also absorbed other responsibilities including interdiction of Cuban and Haitian vessels carrying illegal immigrants; patrol of waters frequented by drug traffickers; containment of oil spills; and support and transportation for scientists on polar expeditions.

As its array of responsibilities grew, however, the Coast Guard, like other federal agencies, was also confronting the reality of leaner times. The federal government had proclaimed its commitment to cutting costs, improving productivity, and becoming more efficient, and although the Coast Guard's budget had risen slightly in the previous two years to \$2.7 billion in 1990, the sense through the organization was that the service was being asked to do substantially more with less. In TQM, Admiral Kime saw the dual promise of boosting internal efficiencies with offering proof that the Coast Guard was doing all that it could to trim fat and streamline operations. "Our budgets have been fairly stable and we've been given lots of new missions," declared chief of staff Rear Admiral Robert Kramek. "The only way we can accomplish those is to grow from within and to become more efficient somehow."

More worrisome than mere budget cuts, though, were periodic proposals by outside critics to dismantle the Coast Guard and transfer its duties to agencies such as the US Navy, the Customs Service, the National Marine Fisheries Service, and the Drug Enforcement Agency. In addition, private companies in such fields as commercial search and rescue, buoy maintenance, and engineering consulting, were greedily eye jobs traditionally handled by the Coast Guard.

To help reduce the Coast Guard's vulnerability to attack, Kime hoped to better balance the attention and resources that the agency gave its four central missions: maritime law enforcement, maritime safety, environmental protection, and national security. Since being placed under the Department of Transportation in 1967, the agency tended to favor one mission area at the expense of the others, a strategy that the commandant believed had weakened the Coast Guard. But Kime also realized it would take more than a

reapportionment of resources to convince skeptics that the service was ideally suited to carry out the diverse tasks it had been given. Here, again, TQM might help in demonstrating the Coast Guard's commitment to accomplishing all its assigned missions capably and at a reasonable cost.

Cries for change were also arising from within the Coast Guard. For the most part, officers and enlistees in the field believed they had already logged an impressive performance record. When it came to operations, the organization gave them the autonomy and the support they needed to make decisions quickly and act independently. Whether arresting armed drug runners, containing an oil spill, teaching children about water safety, or rescuing capsized fishermen in rough seas, most Coast Guard members were intensely proud of their organization, as well as of their own abilities to work under pressure, take risks, and operate as part of a highly effective team.

But mixed with pride was a large measure of cynicism and frustration. The same organization that placed such importance on responding quickly and boldly to a variety of emergencies seemed to lose its decisiveness and aptitude for risktaking as soon as it moved out of the operational sphere. Indeed, a numbing progression of regulations, administrative procedures, and reporting requirements imposed from above had left many in the field frustrated, overworked, and filled with a sense of impotence. The anger generated by the tangle of requirements had created an "us versus them" mentality: Many field commanders were convinced that their productivity and efficiency would soar if only headquarters would leave them alone.

Cynicism was also rife at headquarters. Under the agency's bureaucratic and military-style management structure, decision-making had become a careful and cautious process, with parties anxiously seeking consensus while at the same time adhering to a strict chain of command. "I had escaped coming to headquarters for 23 years because I thought this was the most dysfunctional place in the Coast Guard," exclaims Captain Ronald Marafioti, chief of the Naval Engineering Division at headquarters. The sense of organizational paralysis was

captured in the tortuous process reported by one commander who needed the chief of staff's signature on a simple thank you note: Nineteen people, including secretaries, reviewed the letter before it was signed by the chief of staff. "The supporting infrastructure has got a lot of arthritis," one captain summed up. For Coast Guard personnel hoping to break through the administrative and bureaucratic logjam, TQM's reputation for flattening hierarchies and empowering employees offered the possibility of some relief.

Admiral Kime had seen internal issues to resolve, as well. The Coast Guard was notoriously week in long-term planning, and this deficiency had become even more pronounced in the late 1980s when the agency dismissed most of its planning staff to fund enforcement-related missions. "I think that the Coast Guard traditionally has done an A-plus, outstanding job in short-term things," Kime later remarked. "In long-term things, whether they're continuing to implement existing programs, finding better ways to do things, or long-term acquisitions, we leave a little bit to be desired." Moreover, loyalties to specific mission areas and geographic locations within the Coast Guard had effectively divided the organization into a number of separate and often highly competitive program specialties — what the commandant referred to as organizational "stovepipes." If TQM could focus the Coast Guard on serving its customers, and improve cooperation among mission areas, Kime believed, the agency would be well on its way to achieving its full potential.

3. TQM in the Coast Guard

The agency that Kime hoped to transform had a rigidly structured hierarchy, and was both operationally diverse and geographically dispersed (for an organization chart, see Exhibit 1). At headquarters, the commandant, vice commandant, and chief of staff were top-ranking admirals. Ten rear admirals ran the major headquarters offices, overseeing about 30 different program areas. The ten Coast Guard districts – including Alaska, Hawaii, coastal regions, and the Great Lakes – reported to either a Pacific or an Atlantic area commander of

the same rank as the vice commandant. In addition, about 25 headquarters units scattered around the country reported directly to headquarters.

Each district office supervised four different categories of field units; groups, air stations; marine safety offices; and cutters, or boats designed for extended operations, of 110 feet or longer. Personnel at this field units often numbered in the hundreds. In addition, the first category of field units, the groups, typically supervised smaller units, including boats under 110 feet long; small stations, which might consist of just a handful of personnel; and aids to navigation teams, teams whose responsibility was to maintain and repair a variety of navigational aids, including lighthouses and buoys.

Bringing major change to an organization this complex would not be easy. As the result of a 1998 headquarters reorganization, the agency had already created a Productivity Improvement Branch that had launched several initiatives quite limited in scope. Such efforts as the Beneficial Suggestion program – later renamed Idea Express – and the Productivity Improvement Fund, for example, were both designed to spur money-saving innovations, with the former program rewarding individuals for successful ideas, and the latter provided startup funding for projects that might save money or personnel. The Model Unit Program, begun in 1989, had sought to address the issue of bureaucratic overkill by allowing a selected cadre of unit commanders to challenge policies and procedures that they viewed as unproductive.

But Admiral Kime wanted a big program – something to jolt the Coast Guard into action. TQM seemed ideal. A few headquarters offices and at least one field unit had already implemented TQM on their own with some success. The time was ripe, Kime felt, to commit the Coast Guard to top-down organization-wide implementation of the management philosophy. In September 1990, four months after becoming commandant, Kime formally announced his TQM plans at the Williamsburg Flag Conference, a biannual meeting of the Coast Guard's top leadership.

As Kime and his staff had designed it, an entire day was to be devoted to presenting TQM to the flag officers and allowing the officers to air their feelings. Gaining widespread support would give the program a strong early start. The kickoff, however, did not go quite as planned. Despite Kime's enthusiasm, some of the admirals were wary of the management approach, and highly skeptical about the value of a comprehensive TQM rollout.

According to a story later told and retold around Coast Guard headquarters, Kime began to grow impatient as the questioning and doubts persisted, and finally lost his temper. After one dubious admiral remarked that the Coast Guard seemed to need either a carrot at the end of a stick, or the threat of a bear in the woods before it would change, Kime was said to have cut the conversation dead. "If you people need a bear in the words, you're looking at him," the commander reportedly declared. "His name is J.W. Kime." The TQM discussion was over.

At the end of the day, Kime directed that an Implementation Planning Team (IPT-1) be chartered to develop a two-year TQM implementation plan under the leadership of a top-level Executive Guidance Team. Among its tasks, the ten-member IPT-1 team was to create a Coast Guard vision statement, articulating the agency's desired future state; a structure of committees and groups to lead, support, and carry out the implementation; and a series of commandant instructions to provide formal guidance for the implementation – all within six months.

4. The Plan

One of IPT-1's first acts was to hire Boston area-based TQM consultant Organizational Dynamics, Inc. (ODI) to guide the implementation planning and provide TQM training. The Executive Guidance Team, chaired by the commandant, had approved a budget of \$5.2 million to provide headquarters support during the first two years of what was expected to be a five-to six-year implementation process. In addition to covering ODI's role, the money would fund quarterly flag officer briefings at headquarters, and the establishment of the

Leadership Institute, an internal TQM resource center that would eventually provide training and expertise and develop Coast Guard-specific TQM materials. Once ODI had trained a critical mass of the Coast Guard, and the Leadership Institute was opened, Kime planned to dismiss ODI and to cut off most headquarters funding. Local commands would then take on the financial responsibility of driving TQM forward.

With ODI's guidance, and periodic input from the Executive Guidance Team, IPT-1 set to work. Captain James Townley, head of the Plans Policy Division, and chairman of IPT-1, admitted that at first, TQM was an appealing enigma. "Quite honestly, none of us fully understood what it was," he confesses. "But we liked the sound of it. There was quite a lot of hype going around Washington as more and more federal agencies discovered this new way of doing business." By January 1991, the team had hammered out a five-sentence Coast Guard Vision Statement, gotten Kime's approval, and distributed it to all the flag officers. "Ideally, we would have liked the commandant to put pen to paper and spill his guts out on what he thought the Coast Guard of the future should be," remarked one team member, "but he didn't do that."

Simultaneously, IPT-1 and ODI began devising the management structure that would support the implementation of TQM principles and tools throughout the Coast Guard. Although ODI would use its standard materials to train Coast Guard personnel, the overall implementation plan was to be a custom job. "The Coast Guard has its own very, very strong traditions and cultures," explains ODI Vice President David Dennen. "If you ignore that and say, 'Here's how you're going to do it,' it just doesn't work."

Among the team's – and the commandant's – key concerns was the creation of an implementation framework that would not challenge or interfere with the Coast Guard's existing operational chain of command. "A lot of concern was expressed by the more skeptical members of our organization at the meeting in Williamsburg about the fact that we do have a certain organizational

structure." Kime explains, "that we're a military organization, and that we've got to be very careful about how we do this."

The plan that the team devised, with Kime's approval, seemed to fit that requirement. The "parallel overlay structure," as it was described, established a hierarchy of groups linking all parts of the Coast Guard, relying on the existing chain of command without exactly duplicating it. At the top, the Quality Counsel, made up of the commandant and the four most senior flag officers, would be responsible for the overall TQM plan – setting policy, providing resources, establishing measures, and rewarding TQM efforts. At the bottom, natural work groups, comprised of any group of individuals who normally shared in a task, would apply TQM tools to continuously improve their own work processes.

In between were a cascading series of groups, usually linked vertically by having a member of the higher-level group chair the next lower group, and often linked horizontally by drawing team members from across functional boundaries. Executive Steering Committees, the highest-level group within major commands at headquarters, area, and district levels, were to develop plans, review progress, and reward success on a more local level. Quality Management Boards, comprised of senior managers from a specific command level, were to be crossfunctional entities responsible for an individual command's tactical TQM efforts. Among the boards' most important functions would be to charter Quality Action Teams (QATs), small groups convened to address specific problems. Once a QAT presented its analysis and recommendations, it would be up to the Quality Management Board that chartered it to approve and act on the recommendations.

In addition to the overlay, IPT-1 specified two roles critical to the implementation — those of the TQM coordinator and facilitator. Each headquarters office, district, and field command was to have a TQM coordinator, typically a mid-to senior-level officer, responsible for the overall coordination of the implementation. This included providing technical and administrative support; scheduling and overseeing training; helping to arrange meetings;

administering awards and recognition; overseeing facilitators; and coordinating the TQM budget. Reporting to coordinators were the TQM facilitators, whose primary job was to teach those not already trained by ODI.

The Productivity Improvement Branch, the two-year-old group that had sponsored the agency's other recent productivity and quality initiatives, was named the TQM coordinator for the entire Coast Guard, charged with organizing ODI's training sessions, and developing, administering, and evaluating TQM policies and plans.

In January 1991, as IPT-1 was laying out the fundamental policies and structures that would support the TQM implementation, the first groups of TQM coordinators and facilitators reported to the Coast Guard's Reserve Training Center in Yorktown, Virginia, for training. ODI offered three different programs: about 150 coordinators would attend five-day sessions; the approximately 350 facilitators would receive the most training – nine days – to prepare them for becoming teachers themselves; and some 1,800 senior managers who would be serving on executive steering committees and quality management boards were slated to begin three-day workshops in May. The 29 flag officers, the top echelon of the Coast Guard, would attend a half-day briefing in January on their roles in, and responsibilities for, implementing TQM.

As flag officers and district and field commanders began to select their coordinator and facilitator candidates and send them off for training, Admiral Kime – who saw spreading the word about TQM as a key leadership function – stepped up his discussions with senior officers and others about the importance of TQM. "I was talking everywhere I went about what we were doing and why I felt this was not only a good idea, but something that was almost a necessity," he says. At the same time, IPT-1 published the first commandant instructions devoted to TQM. Although the instruction did not address why the Coast Guard was implementing TQM, it briefly described the philosophy, introduced the overlay structure concept, and provided a glossary of TQM terms. The second instruction, released in February, gave more details about the overlay and

training procedures, and in June, the group sent out two final instructions, one on communications and measurement, and one on rewards and recognition. The four instructions constituted the formal guidance give to Coast Guard personnel for implementing TQM.

In May IPT-1 presented its two-year implementation plan. Phase 1 covered the work just completed, while Phase 2 would include dissolving IPT-1 and forming a new Implementation Project Team (IPT-2), activating the overlay structure, and chartering the first QATs. During Phase 3, the Leadership Institution would open, and there would be a solid network of working QATs. The final phase would see a trained "critical mass" of personnel, a TQM impact review, the retirement of IPT-2, and transition to "routine TQM maintenance."

5. Early Reactions

By the spring of 1991, most Coast Guard personnel were aware of Admiral Kime's rallying cry for quality, although in many cases, their exposure had ended there. But that didn't stop TQM from provoking strong reactions, both among those who still had scant knowledge of the process, and those who had started to implement it.

Captain Ronald Marafioti, who had done his best to avoid the "dysfunctional" environment at headquarters, was an early and avid supporter. "Anything that brought people together and got them to talk and work as a team is what the Coast Guard needed," Marafioti declares. "TQM seemed to have that label, and I was for it from the first moment I heard about it."

Captain James Ingham, chief of the Fifth District's Administration Division, says he went to the first TQM coordinators' training session a skeptic, but emerged a convert. "I was fired up," he recalls. "I thought, this is the best stuff I've seen in the Coast Guard for 15 years. I saw it as the only real prospect for a way to deal with the problems the Coast Guard was facing." Lieutenant Commander Carl Bromund, who also trained with the first group of coordinators, describes himself as "a big believer in TQM," and states bluntly, "Clearly the old paradigms didn't work, so we have very little to lose."

Others, however, had quite the opposite reaction. "The TQM program was just another high level headquarters program," declares Captain Richard O. Buttrick, who retired as chief of staff of the First Coast Guard District in June 1990, a few months before the Coast Guard-wide TQM initiative was announced. "If you truly knew what the Coast Guard was about and how it operated, you didn't need it because that was the way we already ran the Coast Guard."

Although early critics found a number of reasons not to like TQM, Buttrick's statement captured the most common complaint. TQM was "just good management," and Coast Guard officers who were already doing it right didn't need all the jargon and fuss. "ODI tried to stress it as something new and wonderful," explains Lieutenant Thomas Beistle, a senior investigating officer at Marine Safety Office Port Arthur who trained as a TQM coordinator. "They would have encountered a lot less resistance if they had simply presented this as tried and true. The military is evolutionary; it is not a revolutionary organization." Captain Larry Hyde, a district chief of staff, voices a similar criticism. "The way it was presented in the Fourteenth District was, 'This is a great thing and nobody ever thought of it before,'" he gripes. "Instead of building on our successes, they said, "You've been doing everything wrong for the last 30 years and TQM is going to be the savior of the Coast Guard.' And, it's not."

Consultant David Dennen of ODI blames some of the early bad press on how the four commandant instructions presented TQM, claiming that a "professional commandant instruction writing team: had muddled an originally lucid set of directions. Dennen, who has shepherded TQM implementations at a number of public and private organizations, also insists that the agency's resistance was not unusual. Yet he observed a different quality to the intensity of some of the Coast Guard's early opposition. "They just despise consultants," he confides. "A tremendous strength they have is their cohesiveness and loyalty, but because they are so cohesive and loyal, they tend to reject everything from the outside. It's almost as if TQM threatens the life from of the Coast Guard."

6. The Implementation

After IPT-1 presented its implementation plan in May 1991, the team was dissolved and replaced by the TQM Implementation Project Team (IPT-2), a group of 11 senior executives led by Caption Robert Houle, who simultaneously replaced Captain Townley as head of the Coast Guard's Plans and Policy Division. IPT-2s charter listed the following "Guiding Principles and Policies":

- TQM will be headquarters-driven.
- Headquarters will fund TQM implementation and training during the start-up phase (first eighteen months).
- We will build independence from the contractor after the first eighteen months.
- We will train the critical mass of our people (5 percent/2000 people)
 during the start-up phase.
- We will use standard tools, methods and language.
- We will balance application of TQM and training.
- We will focus our efforts on behavior.

Like IPT-1, IPT-2 had a full plate. The team was chartered to execute the TQM implementation plan; to identify and procure sufficient resources to do that; to monitor and evaluate the process; to communicate problems and needs to the Quality Council; and to recommend necessary changes. In addition, IPT-2 had to design and establish the Leadership Institute, a TQM school, to be based at the Coast Guard Training Center in Petaluma, California, that would eventually assume responsibility for all training and consultation. To carry out its tasks, IPT-2 formed six focus teams to look at measurement, training, rewards and recognition, information and technology, communications, and customer focus.

As IPT-2 was gearing up, the newly training TQM coordinators were assessing how to get started. Although every flag officer has to have a trained TQM coordinator, each admiral controlled the decision of whether to make the coordinator's job full-time. Less than a handful chose to do that. As a result, most coordinators had to oversee TQM implementation on top of their regular

full-time jobs, what consultant Dennen dubbed the "collateral duty curse." Although the original estimate was that TQM duties would take only 20 percent of a coordinator's time, most coordinators found themselves "doing" TQM at least half-time, a commitment that often stirred up considerable friction among overworked co-workers and supervisors. "The organization should have provided this full-time at our level to all the admirals," asserts Office of Personnel coordinator Commander Bruce Wallisch, one of just three full-time coordinators at headquarters. "Most of our counterparts are part-timers, and it shows."

Clearly, implementing TQM had the potential to be a demanding job. The coordinators, with the support of their commanding officers, were to begin training personnel, getting the overlay structure in place, identifying processes to be improved, and forming QATs and natural work groups to use the tools of TQM. Just exactly how to do this was largely up to their individual coordinator. "The commandant made a very critical strategic decision that we would allow and encourage innovation in TQM," explains Captain Houle, the leader of the IPT-2, who compares his job to being the conductor of an improvisational jazz band. "We would have standard tools, but within each major command we would allow them, and, in fact, encourage them, to do TQM whichever way felt right to them."

For coordinators at many of the ten major offices at headquarters, as well as at many of the ten district offices around the country, what "felt right" was to move forward cautiously, and to watch what others were doing. After senior officers received their ODI instruction, training often slowed or stalled. Some offices did not follow the overlay exactly as described, establishing a Quality Management Board, for example, but not forming an Executive Steering Committee. Participants at some early Quality Management Board meetings reported that it took several months for the boards to move beyond normal senior staff business. When the boards did take up TWM, they typically looked at internal process improvements, such as encouraging better communication, rather than at such external issues as identifying and serving customers. QATs

were more prevalent than natural work groups, perhaps because natural work groups required more lower level involvement and training.

The four commandant instructions had provided only a bare bones framework of guidelines and expectations. In part to address this void, the Productivity Improvement Branch, renamed the Quality Management Branch to reflect its growing TQM thrust, in November published a "TQM Implementation Guidebook," "the major policy and procedure manual guiding the actions of all TQM coordinators and facilitators as they carry out their assigned role."

According to Houle, the guidebook for the first time presented coordinators with a clear plan. The document described TQM structural overlay, how each piece fit in the overlay, the basic responsibilities of the various TQM teams and boards, and what each entity's charter should contain. A "Roadmap" detailed the first two years of implementation, charting a month-by-month account of when particular events would occur, such as Executive Guidance Team reviews, impact assessments, and training. But while the guidebook provided a useful summary of mostly headquarters-related oversight and structural goals, it did not answer such tactical questions as whether everyone in an office or unit should be trained before attempting to apply TQM tools; whether the initial emphasis for results should be put on QATs or natural work groups; how often teams should meet; or how field units might integrate TQM into their "regular" activities.

For some coordinators, the lack of direction proved problematic. Commander Art Crostick, planning officer for the Seventeenth District in Juneau, Alaska, was warned at the first coordinators' training in January 1991 that he would face resistance. And, in fact, when he returned to Juneau, he discovered that "most people weren't really interested" in TQM. According to Crostick, the lack of guidelines made it even harder to motivate his co-workers. "Headquarters has never come out and said, 'You will be at such and such a point with your implementation by such and such a date." Crostick observes. "Most of the

district coordinators would have preferred more of a firm target date, because it gives you something to shoot for and there's some implied pressure from the top guy."

The lack of coordination also made it difficult for more aggressive groups that had embraced TQM to use the tools beyond their own areas of operations. "We were frustrated," admits full-time coordinator Commander Bruce Wallisch. "You almost need to have this whole building working in unison in implementing it for it to be effective. You can only go so far before you have to interact with someone who doesn't understand what you're talking about."

The decentralized nature of the Coast Guard, and the tendency of personnel to identify strongly with their specific mission areas, contributed to the differences in TQM implementation. Although the commandant hoped to use TQM to break down these organizational "stovepipes," TQM coordinator Commander Jeff Way confides that the coordinators still referred to the various admirals' operations as "29 different kingdoms." Reflects Captain Richard Davison, head of the Quality Management Branch, "All those communities think differently, just have different thought processes that are driven by their missions. That diversity makes it difficult." In fact, most of he headquarters and district offices had already drafted separate TQM vision statements, reflecting their own operational perspectives and goals.

But the most critical factor in a group's progress with TQM, most coordinators agree, was the degree of top-level support and commitment. Because financial backing from headquarters essentially stopped with the ODI training, it was up to the flag officers, or their Executive Steering Committees, to decide how much time and money to devote to local training, how quickly the effort should move forward, and how much time the coordinators should devote to TQM. "The amount of time invested in TQM has been directly proportional to the priority placed on it by the leader of the command," Commander Art Crostick declares. "Without the command's strong backing and motivation it's very, very difficult." Indeed, coordinators who had not garnered strong support from their

flag officers reported such problems as poor attendance at training sessions, the inability to agree on process improvements, and widespread cynicism among both the enlisted and officer ranks.

For commands whose leaders had embraced TQM, however, the looseness of the Coast Guard's implementation plan allowed for flexibility and innovation. TQM coordinator Captain James Ingham, for example, led the Fifth District in an intensive TQM rollout, which took the Coast Guard's standard plan as just a starting point. In the first three months of the implementation, Ingham met regularly with his district admiral and chief of staff, contracted with a local quality management institution for additional training and resources, nagged senior officers to read books on quality, and arranged for Executive Steering Committee members and other senior officers to attend quality management seminars in addition to their three-day ODI training.

With the chief of staff's blessings, Ingham convinced each of the district's six division officers to assign a lieutenant to serve on a special Quality Process Advocate team to tackle the many nuts-and-bolts issues of the implementation. In addition, Ingham solicited four volunteers from the Executive Steering Committee to form a Design Group, a sub-committee that would do additional research, visit other organizations' quality programs, and report back to the committee on processes and topics to be addressed. In order to keep the middle layer of the organization involved, Ingham sent 45 mid-level officers off-site for a half-day TQM briefing, followed by a brainstorming session. The 111 ideas generated there were later narrowed down by the Design Group and the Executive Steering Committee to arrive at the first seven ideas for QAT process improvements. In June, seven facilitators began training QAT team members, and then expanded the training to the rest of the organization.

By October, nine months after Ingham had set to work, all 28- members of the district staff were trained and participated in a natural work group, seven QATs had been chartered, and the district was preparing to export TQM to the field. "Islands of excellence are the way to start off," Ingham declares. "Some

commander somewhere will get fired up by this, produce some results, and then his peers will see that the risk is relatively low. Only after you have a few islands of excellence do you try to import it back into the center of the organization and make it happen there."

The Fifth District was not alone in its impressive TQM debut. One unit and an area-level division, after implementing TQM, had demonstrated enough overall process improvements to be named in October as finalists in the Secretary of Transportation's First Annual Quality Award. "We've been criticized by people who have since turned out to be the laggards: 'Tell me what to do and I'll do it, and I'll do it very well," Captain Houle recounts. "Those folks were left behind for a while, but it allowed the real innovators – the chargers – to surge ahead." Adds consultant Dennen: "If we had tried to push any harder, the Coast Guard would have pushed back and killed it."

By late spring 1992, the Coast Guard had fulfilled its goal of training the top five percent of Coast Guard management ahead of schedule. Most field units, however, still had not formally introduced TQM.

7. Successes

With the second year of implementation well underway, the Quality Management Branch began collecting TQM success stories. A QAT convened to improve the often inefficient and delay-plagued process of repairing the Coast Guard's largest ships made recommendations that resulted in a 44 percent reduction in lost operational days for the Atlantic area's 32 cutters, saving about \$4 million a year. A team at the Coast Guard Yard in Curtis Bay, Maryland, charged with investigating unexplained excess water usage discovered winter freeze protection valves mistakenly left open all year. Closing the valves during the summer cut daily water consumption by 47 percent, and was expected to save over 40 million gallons of water annually.

A natural work group in the Office of Personnel, looking to cut the cost of the "sea bags" given initial recruits, discovered the some clothing and personal care items were wasted because recruits usually preferred to supply their own. By eliminating the military issue underwear, and a few other unpopular items, the group estimated it would save \$250,000 a year. The Reserve Training Center in Yorktown, Virginia, relied on QAT recommendations to revamp how it prepared students for and administered a military requirements test, raising the initial pass rate from about 50 percent to 85 percent. In addition, the Coast Guard incorporated TQM methods into studies on boarding procedures, healthcare delivery, and work life, as well as a new programming, planning, budgeting, and evaluation system.

By May 1992, when the commandant presented the Coast Guard's 1993 fiscal year budget request to the US Senate Subcommittee on Transportation and Related Agencies, he was able to cite some of these successes as proof of the service's pledge to provide more with less. "We have committed ourselves to improving our performance as the world's leading maritime humanitarian and safety organization," Admiral Kime declared, "and intend to give the American public the greatest possible return on its investment in the form of high-quality service."

There were also less heralded improvements. At headquarters, many people were most impressed not by the stories of specific money- or resource-saving innovations, but by the fact that people were talking to each other. The increase in communication was slowly changing how things got done. Deputy chief of staff Captain Howard Gehring offers this example:

Three years ago, if we were going to have a meeting on a particular topic, we would have brought in people with opinions similar to ours. But under the TQM process, we have dialogue going on among groups that never, ever talked about issues across the boundaries. The net result is that rather than having a fix put into place based on the strength and personality of the person who called the meeting, and that would only live as long as that person was there to beat the system into submission, you now are putting into place something that will endure. Through a process of inclusion you have a long-term solution.

In those field units where TQM had taken hold, advocates of the process seemed similarly impressed by the little changes. "The true, clear win success stories are going to be changes that are made on the margin – the little small things," muses Lieutenant Thomas Beistle, TQM coordinator for Marine Safety Office Port Arthur. "It's kind of Zen. Let's make tiny, subtle process changes that will save us a paper clip, or save us from routing through on in-box that we don't need to, that will make a marginal difference in how efficient and how effective we are."

8. Backlash

But enthusiasm for TQM was by no means universal, either at headquarters or in the field. Some critics charged that the problems QATs were chartered to attack were too large. Others claimed they were too often insignificant. "To be very honest," one officer confides, "when I read the reports that come out of headquarters about the successes of TQM, I see that the examples are very shallow."

Many agency members questioned how the Coast Guard was implementing TQM. According to some critics, heavy-handed TQM enthusiasts were trying to enforce style changes that had nothing to do with substance. Captain Art Whiting, commander of the Marine Safety Office in Tampa, Florida, angrily describes how a young officer who volunteered to become the unit's TQM facilitator "failed" the training. "He went through twice," Whiting exclaims. "Just because he wasn't open enough to jump on desks and scream and shout, they wouldn't certify him as a facilitator and he didn't pass." Adds on frustrated admiral: "Our leadership is making a gigantic mistake on TQM. There is a hunger for more knowledge and more tools. But when I've gone to these TQM sessions, they're presenting what should be a prerequisite for Management 101 like it's the Holy Grail."

Others challenged whether the Coast Guard leadership was really following the principles it espoused. Lieutenant Junior Grade Laura Pearson, who served on a natural work group asked to reorganize a division within the

Office of Personnel and Training at headquarters, became disillusioned after senior officers suggested that the group alter its recommendations, a violation of the basic tenets of participatory decision-making. "Some of the people in the group didn't see what was happening, but I certainly did," she says. "If they were just telling us to have a brainstorming session and come up with some suggestions, and then they'd mold it into what they wanted, that would have been one thing. But to call it TQM bothered me. And they do. The still talk about that as one of their success stories."

There were other process-oriented criticisms. The Coast Guard's military-style, top-down implementation, and the widespread focus on QATs rather than natural work groups, had reinforced the oft-held belief among lower level officers and enlistees that their input and reactions weren't important. Roger Monyhan of Marine Safety Office Port Arthur, commissioned as a chief warrant officer after 17 years in the enlisted ranks, says he was "ready to be convinced" of TQM's worth, but remained skeptical. "I would say at the field level and the enlisted person level, the feeling is that it's just some officer's idea, and we just have to go do it." Captain Paul Garrity, commanding officer of Air Station Cape Cod in Massachusetts, adds this perspective: "We have spend upwards of \$5 million in our organization to introduce about seven percent of our people to the real inner workings and hidden mechanisms of TQM, and the rest of the people are on the outside. The majority of the people in the Coast Guard looking at TQM think it has decoder rings and secret handshakes and buzzwords that only those chosen few have seen."

Finally, a lack of regular feedback on TQM matters had left some coordinators, facilitators and team members feeling isolated and uninformed. As originally envisioned, a sophisticated Coast Guard-wide electronic bulletin board was to have linked coordinators by providing a centralized system for sharing information, articles, and anecdotes about their TQM implementation experiences. In fact, the "TQM Implementation Guidebook" specifically stressed the importance of communication. "The overlay cannot operate without general

awareness of the types of processes and problems receiving attention throughout the Coast Guard . . . " However, the computer link, which one caption described as "the unpopular, dysfunctional bulletin board," still had not worked properly. Instead, the Quality Management Branch relied on an existing electronic-mail system to make sporadic TQM announcements.

IPT-2 concluded its work on July 1992. In its final report, the committee made several recommendations, including the creation of a full-time quality advisor reporting to the commandant, a concept first raised by IPT-1. "This position . . . is critical to the continuing institutionalization of Total Quality Management throughout the Coast Guard," the report concluded, "and it sends the right signal." The report also urged that the Coast Guard keep ODI as a consultant to the Quality Council at this "very critical juncture" in its TQM evaluation.

At the IPT-2 closeout ceremony, Admiral Kime reiterated his strong support for TQM:

"There are four stages to TQM: The first is "Awakening." We've just gotten out of that stage. The second one is "Activity." That's where we are right now. Third is "Breakthrough," and the fourth is "World-Class." In my travels around the Coast Guard, I've seen and heard the "Awakening." In most places it's been like a "general quarters" alarm; in a few it's been like a "hibernating bear." But summer comes even for a hibernating bear."

"For those of you who don't know me . . . if I'm nothing else, I am persistent, I am dogged, I don't change, I don't get tired, and I can't be swayed from where I honestly think I want to go unless someone has a good reason. I don't see a reason for changing one iota from where we're going with TQM."

9. The View at the Top

Almost no one at Coast Guard headquarters questioned Kime's commitment to making the TQM implementation succeed. The *Commandant's Bulletin*, a monthly magazine for the entire Coast Guard, featured regular commentary by Kime on the TQM implementation. After deciding that personally

appearing at headquarters training sessions was too time-consuming, Kime circulated a half-hour video in which he spoke extemporaneously on TQM issues and answered audience questions. TQM was one of the first topics Kime addressed in his 1992 State of the Coast Guard address. And the commandant had begun lecturing on TQM to other government agencies interested in the management approach, such as the Federal Bureau of Investigation. "He never missed an opportunity to talk about TQM," says Captain Houle, head of IPT-2 and the Plans and Policy Division.

But the level of support among the other flag officers was much less certain. Although most admirals back TQM in public, in private, some spoke out against the concept. "Those people who want to be part of the very upper level management in the Coast Guard have embraced Kime's attitude, whether they agree, or not," states Captain Paul Garrity of Air Station Cape Cod. "If you're not a proponent, you must be an opponent, and if you're an opponent, you're going to be released from the organization." According to consultant Dennen, only 40 to 50 percent of the admirals were truly committed to TQM. The remaining 50 to 60 percent were "all over the map," he says, "from counter-revolutionaries trying to fight each other, or complete apathy, to 'I'll play along until Admiral Kime is replaced." Two admirals were even said to have cited TQM as a reason for retirement.

The unevenness of senior backing was not lost on those below. One coordinator, noting that TQM required the active support and involvement of the top brass, complained about the shallowness of senior manager training, likening it to "trying top dip your big toe in the pool when it is time to start swimming some laps." A district chief of staff griped that the flag officers weren't obeying basic TQM processes at their own meetings. Some observers at headquarters even described Kime, despite his demonstrated commitment, as "not very TQM-ish" in his management style and treatment of personnel.

But Captain Houle wanted more. In a memo to the chief of staff, one month after IPT-2 dissolved, he again raised the issue of a dedicated quality advisor:

"The Commandant needs a TQM conscience. Even if the Quality Council picks up a proactive, driving role in TQM, that won't be enough . . . a high level, continuous and dedicated focus on, and focusing of, TQM is needed."

At its November 1992 meeting, the Quality Council took Houle's advice and approved the new position of a quality advisor reporting directly to Admiral Kime and overseeing the Quality Management Branch. Soon after, council chose Captain James Ingham, who had already made a mark as TQM coordinator for the Fifth District, to fill the post. According to the vice commandant, Vice Admiral Robert Nelson, "We want somebody who can go in and talk to the commandant on a regular basis and say to him, 'You have to do this, you have to say this, these are your options to move TQM forward." Houle, who supported Ingham for the quality advisor job, declares in a matter-of-fact aside, "Jim Ingham stands probably 50 percent chance of being fired because he's more outspoken and less tactful than I am."

Ingham, for his part, saw his mission clearly: "The most important challenge right now is to get TQM to be successful for headquarters. If we're not perceived as being successful at headquarters, then future leaders will cut it out."

10. Two Years of TQM

As the Coast Guard finished its second year of TQM implementation and started its third, those tracking TQM began taking stock. While no one claimed that the agency had achieved the "routine TQM maintenance phase" foreseen by IPT-1, many of the goals articulated almost two years earlier had, in fact, been realized. A "critical mass" of the Coast Guard has been trained; the Leadership Institute had accepted its first class students in October; and the structural overlay, with its network of teams and groups, was largely in place. About a third of the Coast Guard was implementing TQM aggressively, consultant Dennen estimated, while another third was mixed, and a final third was "still tied up at the

dock." TQM coordinator Lieutenant Commander Carl Bromund was hopeful. "I would say the first two years set the stage," he says. "We had a lot of activity and not many results. Now we're starting to get it."

But despite the progress, a number of stubborn barriers remained. Although improved customer focus was a basic tenet of TQM, the agency's multiple missions left many in the Coast Guard confused about who its customers were, and how it was supposed to serve them. At headquarters, the issue was particularly clouded. The Coast Guard interacted with groups including recreational boaters, fishermen, environmentalists, Congress, and the American Public. But most personnel based at headquarters were several steps removed from such external customers. Instead, said Captain Ingham, the new quality advisor, headquarters needed to think about serving the rest of the Coast Guard:

The old paradigm in the Coast Guard was that the commandant and all the little commandants working for him considered themselves the most important people in the Coast Guard. Along comes this philosophy that says, no, no, no, the most important person is the customer. And guess who that is? It's the people in the Coast Guard who are out in the field. You talk about a paradigm shift! All of a sudden the most important people are not in headquarters, the most important people are out in the field. The question is are folds at headquarters going to be able to make that shift.

Even in the field, the question of how to "serve" customers was problematic. "Some of the missions we do are diametrically opposed," explains Captain Garrity of Air Station Cape Cod. "The fisherman loves to see us when he's sinking, but hates to see us when he's out there trawling through the water with the wrong mesh size on his net catching small fish. Do we wear a white hate or a black hat with these guys?"

Measurement was another sticking point. IPT-1 has recommended a baseline organizational assessment as the first step in creating new measures. But flag officers voted against conducting the study, in part because they were

angered by the results of a pre-TQM survey criticizing the quality of the Coast Guard leadership. Without the baseline assessment, it became more difficult to measure the TQM implementation process, let along to assess how the Coast Guard was doing with its basic operational missions. "We don't have real good measurements right now as to how well we're doing." Admits Vice Admiral Nelson.

In June 1992, the Measurement Quality Action Team chartered by IPT-2 has presented its measurement plan. Although the team had spent almost a year in its presentation, team leader Captain Marafioti acknowledged that the plan was just a start, recommending a standard measurement-training program, and suggesting the kinds of questions that the Coast Guard needed to be asking itself. Captain Ingham, the new quality advisor, worried that such questions should have been asked sooner. "Measurement is really part of an integrated philosophy," he says, "and it needs to be embedded in how we do our process improvements, not a separate activity that – now we're going to start measuring."

Finally, many observers felt that how the Coast Guard evaluated people and what behaviors it rewarded needed to be changed if TQM was to take root. According to TQM coordinator Bromund, senior officers viewed from below as "anti-TQM" were still moving up through the system. "We have a lot of bright people in this outfit," he says, "and they're watching like hawks to see what gets rewarded." Adds one captain: "We still have profound Coast Guard systems that are anti-TQM."

Even the most ardent supporters agreed that a great deal of effort lay ahead. "There is a tremendous cost in terms of time," says deputy chief of staff Captain Howard Gehring: "You're keeping two ways of business going at once. We're spending a lot of time nurturing, bringing along, cajoling, convincing, and making things work." Commander Scott Allen, a TQM enthusiast who had seen all 215 members at Group Port Angeles in Washington trained by December 1991, only to have 77 new people – most with no training – transferred in the next year agrees. Although the management philosophy had come advertised as

a five-year program, Allen says, "Our general consensus is that it will probably take a full Coast Guard generation, which is 20 years."

11. TQM After Admiral Kime

With two years of TQM implementation completed, Admiral Kime prepared to push hard for further gains. According to a draft of the Quality Council's plan for Year Three, the ongoing effort would focus on three major goals: streamlining and simplifying the program, and saturating the Coast Guard with TQM. "There will be less and less freedom," observes chief of staff Rear Admiral Robert Kramek, who nevertheless insists that the Coast Guard's early focus on fast results had been fruitful. "Washington lives year-to-year, but this is a long-term project," he adds. "It's hard to sustain long-term projects in the government without some quick successes."

But it was less clear what would happen after the third year of implementation: In the spring of 1994, Admiral Kime would be stepping down. "We see a new commandant every few years, a new president every few years, a new Congressman every couple of years, and we weather the storm," observes Commander Joe Brusseau, chief of the Inspection Department at the Marine Safety Office in Long Beach, California. "People start to feel, well, in four years it will be something else. Hanging TQM and all those three-letter acronyms out there is bound to elicit that response."

Kime insisted that the Coast Guard would stick with its quality program. "I think our chances of success on a scale of one to ten are about eight-and-a-half right now," he declares. More significantly, perhaps, senior officials agreed that the four admirals considered most likely to succeed Kime were all supporters of a quality management program. "The people who are not supporters will not compete well for the commandant position." Ingham, the incoming quality advisor, asserts. "I predict the name may change. But the content of what we're embarked on will not change. That will be a steady maturing process. And heaven help this country if it isn't. If we abandon the emphasis on quality, then we will be a nation in decline."

TQM coordinator Lieutenant Commander Bromund echoed Ingham's statement. Bromund still harbored doubts about how the Coast Guard was implementing TQM. But he embraced TQM as the service's best hope for the future. "If you look ahead and see all the things we have to do, it's very discouraging," he says. "But if you look back and see the things that we've done, there is clearly a change in the organization."

APPENDIX C: BUSINESS PROCESS TRANSFORMATION AT THE CIA

A. BACKGROUND

The following text is an excerpt from "Business Process Transformation at the CIA" authored by Steven Kelman (1999a, 1999b, 1999c).

B. BUSINESS PROCESS TRANSFORMATION AT THE CIA (A)

1. Introduction

Casual visitors to the spacious, airy cafeteria at the headquarters of the Central Intelligence Agency (CIA) in suburban Langley, Virginia, could easily imagine they were at the site of a large high-tech company in the Silicon Valley or, for that matter, at one of the many large high-tech firms in surrounding Fairfax County. Employees line up behind brightly signed areas offering Mexican, Chinese, or soup and salad. Some with beards and scraggly hair, many in jeans or tee shirts, others in suits and tires, many women and a smattering of people of color, they are on the whole younger than the workforce in most federal government agencies. Many of the tables are scenes of animated conversation.

Closer inspection, however, reveals differences from the typical government, or private, cafeteria. If you are in the building on a visitor's red badge – rather than being a "blue badger" (employee) or "green badger" (contractor who's received a security clearance) – somebody with the appropriate blue or green badge must accompany you at all times, even if you need to make a restroom visit. The eating area is dotted with discreet signs reading, "UNCLEARED VISITORS IN AREA," as a reminder to those who are undercover that they need to be careful because of the red badgers around.

The same observation could be made about many of the administrative services provided in support of the CIA's mission of intelligence-gathering, analysis, and covert operations. The services themselves are a familiar litany – finance, logistics (moving materials to people who need them), personnel, telecommunications, information technology, training, medial and security.

Often, however, there is something about the service that separates it from the garden variety. Some logistics involve sending off-the-shelf police equipment to the American embassy; other times, however, the shipment contains highly classified high-tech gear, or something to be used in support of a covert operation in a place with no embassy. Similarly, some doctors provide routine physical exams for new Agency hires; other times, the CIA needs doctors abroad who can treat injured officers operating undercover or psychologists in the US who can treat officers with psychological problems. Even something as apparently straightforward as buying airline tickets can have a special Agency twist: when an employee is working undercover for another US government agency, part of protecting the cover is to make sure the ticket looks as if it were bought the same way tickets are bought for employees of that other agency.

Individually, the support services the CIA provides sound mundane. But taken together, they cost a good deal of money – about 30 percent of the Agency's budget – and are essential to the CIA's ability to do its job.

2. Administrative Services at the CIA

Traditionally, the provision of administrative services at the CIA was organized the same way as in the vast majority of government organizations (and in most private businesses as well). The CIA had three major mission-oriented divisions (or "directorates"):

- The Directorate of Operations (DO), responsible for intelligence-gathering done by humans, and for covert operations. This was the Agency's elite corps, their "fighter pilots" (to use the expression of one insider), who did the risky, swashbuckling jobs.
- The Directorate of Intelligence (DI), responsible for analyzing intelligence from both secret and public sources and producing reports, estimates, and recommendations. These were the Agency's analysts, often with PhDs, who ran an intelligence version of a think tank.

 The Directorate of Science and Technology (DS&T), responsible for intelligence-gathering using technical means such as satellite monitoring or other forms of eavesdropping.

Alongside these directorates stood a fourth, the Directorate of Administration (DA), which provided support services to the other three. The DA was funded by an appropriation earmarked for it, and provided services to the mission directorates at no charge to them. The DA has about fifteen offices, which managed administrative services such as personnel, training, information technology, and logistics. The DA also employed hundreds of support officers who were physically located in the mission directorates and who helped those directorates obtain services from the DA. (See Exhibit 1 for CI organization chart.)

During most of the 1990s, the CIA budget was under relentless pressure. There were two reasons. One was general spending cutbacks to reduce the massive budget deficits plaguing the country since the early 1980s. The second was the winding down and then the end of the Cold War during the second of the 1980s, which, at least initially, led some to believe there would be reduced demand for the CIA's services.

As in most government agencies, when presidential and congressional budgeters sneezed at the Agency's budget, the budget for administrative services caught the flu. Although in principle everyone recognized that, without support services, the mission-oriented directorates could not do their jobs, nonetheless the provision of telephones, training, or travel by what others regarded as green-eyeshaded, pencil-pushing types hardly ranked in glamour with developing sophisticated new listening devices or risking one's life running a covert operation in some remote part of the world. So the DA was the lowest-status of the four directorates. Add to this the perspective of many in the mission-oriented directorates that the DA was a cesspool of waste (whose services, to add insult to injury, were sometimes seen as being of pool quality), and it's easy to see why the DA, year after year, receive a disproportionate share

of Agency budget cuts. Between fiscal years 1991 and 2000, the DA suffered an actual dollar cutback of over 30 percent (the inflation-adjusted cutback was of course higher).

The general view of the other directorates was that if the DA were not so incompetent, it could easily provide needed services at the reduced budget levels. In the view of the other directorates, what the DA needed to do was to cut its costs – how it did so was its job to figure out. And within the DA, an observer notes, the attitude was, "Woe is us, nobody understands our problems." DA people also felt that the mission directorates, in the words of one, had "outrageous needs" and an excessive "standard of living." As another puts it, "The view was that arrogant mission managers with no understanding of the problems beat up on a beleaguered DA."

In 1996 the DA embarked on a radical journey. As a solution for its budget and responsiveness problems, the DA proposed to give its budget back to the mission directorates and to sell its services to those directorates, in competition with commercial (or even other government agency) providers. The DA would exchange the security of its status as a monopoly provider for the uncertainty of competition.

3. Enter Dick Calder

The DA's radical new strategy was the brainchild of Dick Calder, the new head of the directorate. Calder had spent most of his career abroad, as a DO case officer, rather well-known and quite well-respected within the Agency. In 1991, as part of a normal rotation, he came back to headquarters to take a staff job in charge of human resources management in the DO. While on that job, Calder had written a draft "strategic plan" on adapting the Agency's mission to the post-Cold War world. With its emphasis on new priorities for intelligence-gathering and new sources of intelligence, as well as its discussion of the Agency's need to have a better understanding of how it was spending its money and what bank its "customers" in the White House and the national security

community were getting from the different ways it was spending its bucks, the plan was controversial and never got adopted. "People didn't see the old DO anywhere in the plan," Calder recalls. "It was too different from where they were."

In 1995 Calder announced his retirement. But just around this time the head of the DA was retiring, and John Deutch, then Director of Central Intelligence, asked Calder to stay and take over the DA. The DO, Calder's home, was the largest user of DA-provided services. Calder had been a critic of the DA, which he regarded as unresponsive to users. Deutch told Calder that having someone at the DA with a user perspective would shake up the directorates at a time when it was being both cut and criticized. Calder was intrigued by the challenge of having a case officer run the DA, and he accepted. Deutch's marching orders were the same as for Calder's predecessor: find ways to deliver administrative services less expensively (to prevent service cutbacks in a time of declining budgets) and more effectively at the same time.

Calder brought with him to the DA only one outsider, Jim Grayson, another DO veteran who had worked in the same region as Calder but never at the same station. Grayson had made some enemies while overseas because of his blunt, outspoken manner and criticisms of the DO post-Cold Ware status quo. At the DA, Grayson worked out of Calder's office, but had not title. ("I don't believe in titles," he says.)

Calder's first step, in response to direction from Deutch for the DA to examine how it did business, was to set up a task force to stuffy the DA's existing costs for its operations, with the goal of either finding opportunities for cost-cutting or (if everything was found to be in order) to be able better to justify the directorate's budget. That task force came upon an accounting technique, originally developed by Harvard Business School professor Robert Kaplan, called "activity-based costing" (ABC), a methodology that allowed companies to learn how various indirect costs should be assigned to a company's different activities or products. Calder decided he needed to bring ABC to the DA.

Everybody in the DA agreed that getting a handle on costs through ABC was a good idea. "The original plan," says a DA manager who would become a strong critic of Calder's direction, "was, let's find a way to articulate our costs to our customers, so that the customers understood that we didn't have some pot of money buried somewhere."

So far, it seemed as if Calder were treading along a pretty traditional path. But, in private conversations with Grayson, a far more radical brew was beginning to ferment. Both had become enamored of ideas about customer service coming out of the total quality management movement and of antibureaucratic, "shake things up" prescriptions of the 1980s and 1990s literature on corporate management. Grayson in particular was struck by the contradiction between the free market principles on whose behalf the CIA fought the Cold Ware and the monopoly, command-and-control organization of the CIA both externally with its intelligence "customers" (such as the White House, the Defense Department, and the State Department) and internally between the mission directorates and the DA. While the two of them had been at the DO, they had toyed with the idea of giving intelligence customers what they playfully called "Dulles dollars" (after Allen Dulles, the legendary one-time CIA Director) that they could use to buy intelligence or analysis from either the CIA or another agency in the intelligence community (such as the Defense Intelligence Agency in the Defense Department). Soon after the pair arrived at the DA, they began playing with the idea of introducing such an approach there. DA service providers would give back their budgets to the mission directorates. directorates would decide how much of a service they wanted to use and whom they would buy it from.

In Calder's mind, the idea of the DA giving up its budget and monopoly status had two attractions. The first was that competition would encourage the DA to provide better quality services at lower costs (or it would lose the business). The prospect of losing money that keep an operation afloat would concentrate the mind on cost savings and customer service. The second was

that it would make the mission directorates co-responsible for thinking about how to deal with the shrinking Agency administrative service budget (since they would not have an incentive to reduce unnecessary demand for services because they were paying for them instead of getting them "for free"). So budget "giveback" would change both DA <u>and</u> customer behavior. "This was a way," an early support puts it, "both to satisfy customers and still leave the DA a viable entity.

To a DA used to the security (albeit, with budget cuts, a shrinking security) of an appropriated budget and monopoly service provider status, this notation was sure to be, at the least a lot to swallow. Calder realized that if any of this was every going to succeed, he had a massive task of organizational change management on his hands. So, as a first step, he did what many organizational leaders do when they want to get a process of change going. In May 1996, he called an offsite meeting for DA office directors at the Wye River Plantation, a facility in Maryland owned by the Aspen Institute (and several years later the locale for the Israeli-Palestinian peace negotiations), and brought in a facilitator, Jim O'Toole, a one-time university professor affiliated with the institute and author of a bestseller called *Leading Change*. The topic was what kinds of changes were necessary for the DA in its new environment.

As in most such meetings, lots of different ideas were tossed around. The office directors did a fair amount of complaining about how they were misunderstood and expressed the hope that the ABC process would help them demonstrate to the mission directorates that the DA wasn't a bloated bureaucracy. But amidst the cacophony, Grayson in particular was vocal about the DA's need to abandon its monopoly status and subject itself to the test of the marketplace. "It was interesting," a critic says, "that Grayson did more talking than anyone else in the group even though he had no experience in the DA." "It was clear," another attendee states," that Jim's agenda was that all the money should be given back to customers. None of the office directorates agreed. Dick Calder was noncommittal.

In August a glossy booklet called The River House Report appeared to "summarize" the conclusions of the Wye retreat. Grayson was its author. By general account, it reflected what one sympathetic attendee calls "Jim and Dick's rendition of what came out of the offsite." "The office directors developed a draft discussion document based on the Wye meeting," remembers one attendee. "Then Dick decided to give it to Jim 'finish up.' What came out wasn't coordinated within the directorate.

Looked at with hindsight, the document, although obviously considered very radical at the time, had a strange ambiguity to it. It was, to be sure, unrelenting in its commitment to the need for change. "Simply put," it said, "we've grown complacent. That's a tough word. It means that we haven't kept up well enough. Yes, we've changed, changed a lot. But . . . the difficulty is that the world around us is changing faster."

The document also clearly introduced the idea that the DA might have to complete for customer business. "Competition is a new word in our setting. But it's not a pejorative word. We know about it and we welcome it elsewhere – indeed it's the central theme of our economic system."

However, *The River House Report* never came out and said explicitly that the DA would give back its budget to the mission directorates. It presented competition as one prong in a two-part over-arching strategy the document summarized with the phrases, "We will be out customers' 'provider of choice," and "we will be – now and future – an 'employer of choice." It continued:

Because our people and our customers have choices, and the more the better, they will know that we can and will provide the best working environment and the best service available. Our customers will increasingly value what we do because they will be choosing us over others, making choices that value what we do, and spurring us on to be better and better because we want to keep them as customers.

The document also mentioned – as part of a subordinate clause referring to development of a "business ethic" – moving "into a competitive, internal marketplace where warranted or to better manage services we provide centrally." And it did announce that "we will begin a yearly process of selecting two or three business areas for competition . . . for implementation in [fiscal year] 1999."

To be sure, it would have not have been difficult to infer that, if customers were to have a choice of providers, they would of necessity need control over the budget money for services in order to exercise such choices. But *The River House Report* never specifically put two and two together.

4. "The Burning Platform"

In October 1996, Calder established a Business Process Transformation Program Office (BPTPO), reporting directly to him, to "help" the offices undertake activity-based costing. Calder chose a DA manager, Paul Ericson, who had run the Office of Training and Education, to head the new office. It was an interesting choice, since Ericson was an abrasive, controversial figure ("the most disliked program director in the DA" according to one critic). Word got out that Ericson had been given marching orders to be a "junkyard dog" vis-<-vis the offices. Interestingly, as if to distance himself from Ericson's hard-charging style, Calder placed the office on the sixth floor of another building, rather than in his director's area on the seventh floor of the main building. (Later, when Calder established a small staff unit to help offices deal with technical issues involving transition to non-appropriated status, he placed that office right near him). The consulting/accounting firm of Coopers & Lybrand was brought in to help BPTPO help the officers with ABC.

While the offices were getting stated on ABC, Calder was deciding that he definitely wanted to move on to the next phase. Having by this time been through a budget cycle as head of the DA, he had gotten a stronger appreciation for how desperate the directorate's budget situation was. "Originally," Calder

recalls, "in my mind a lot of this was about providing better service to the customers. I now fully appreciated that the DA needed to do this to survive."

So Ericson got to work figuring out how specifically to implement giveback. ABC was of course an important first step, since if an office's services went up for sale, and had to be funded through payments from customers rather than appropriated funds, the operation would need to know what its costs were so it knew what to charge. But there was an important next step as well: the development, by offices destined for competition, of business plans that showed how they would improve, tailor, and market their services against likely commercial competitors so as to be able to survive without appropriated funds. In early 1997, the Coopers & Lybrand contract was expanded to include assistance in developing business plans for the offices Calder selected for the first giveback pilots.

During these months, Calder's team also came upon two new ideas that allowed them to give more flesh to their plan. One was the idea of franchising, which Ericson learned about at the website of Vice President Al Gore's "reinventing government" program. Under the franchising concept, one agency was authorized to sell its services to another agency, so that, for example, the Department of Agriculture got into the business of processing payroll checks for other government organizations. In one case, an agency, had successfully bid against private vendors to win a contract to manage another agency's data centers. Franchising was appealing to Calder because it added a carrot for the DA in addition to the stick of losing appropriated funds. The carrot was the prospect of gaining new revenue by selling DA services to other agencies in the intelligence and diplomatic communities (who, for example, could be better at helping the State Department retool embassies against terrorism?).

The other idea, which Calder first learned about from an Agency officer on a Harvard sabbatical, was "working capital funds." This is a mechanism federal agencies use for operations not financed through appropriations. Working capital funds receive payments for services rendered, typically to other parts of the

working capital fund's organization, or to other government organizations. The money is used to pay the operation's expenses; but unlike appropriated funds, which generally expire at the end of a fiscal year and have to be returned to the Treasury if unspent, money in a working capital fund can stay there indefinitely, so that, hypothetically, for example, surpluses could be "invested" in trying to market the operation's services to new customers. Working capital funds had been set up in the State Department, the Defense Department, the Energy Department, and a number of other federal agencies. When he learned about the existence of working capital funds, Calder realized there was an established government institutional mechanism for implementing the giveback idea.

It was now time to spring the plan on the troops. At the end of 1996, Calder held a series of town meetings with employees over a two-month period to talk about his goals for business process transformation in the DA. The remarks he gave to start off the town meetings became known as the "burning platform" speech, because, to communicate a sense of crisis, Calder stated that the DA was perched on a burning platform.

The briefing charts Calder used, government-style, for his speech were blunt and direct – and peppered with various quotes from management experts about the need for radical changes in the way large organizations were run. (See Exhibit 2 for selected briefing charges.) They announced a "Fundamental Shift": the "support budget [would be] transferred to customer/mission managers." Summarizes Calder, "My messages was, 'We have no choice.'"

The reaction to the burning platform speech was fairly unanimous. What had been somewhat vague talk about a few pilots had become a new order for the entire directorate. "There was active opposition," Calder recalls. "People thought we were crazy. There was a very confrontational atmosphere." His two deputies announced their opposition. Only one of the office directors supported him. "Dick was alone," states one observer. "Jim was an outsider. Paul was inside, but he was controversial."

5. Gaining Outside Support

To establish a working capital fund, the CIA needed congressional approval. In early 1997, Calder and Ericson went to the Office of Management and Budget to get administration endorsement for language in the upcoming CIA reauthorization bill allowing such a fund to be set up, and then to the congressional authorizing committees that would need to approve the idea. In their visits, they were accompanied by the chief legislative liaison in the CIA Office of the General Counsel. (Mary Sturtevant, the Agency's new comptroller, or chief financial/budget official, and a support of Calder's ideas, helped Calder to get the legislative liaison to go with them downtown.) However, the idea had not been subject to the inter-directorate clearance process that new legislative proposals affecting more than one directorate normally received. "We went external before trying to sell this to the internal customers in the other directorates," Grayson explains. The mission directorate leadership had at that point paid no attention to Calder's plans for the DA. "We didn't think we could get approved. We couldn't sell this conceptually, we could only see the results. So Dick wanted to build enough outside momentum to get this change actually underway, so you could show results." Notes a sympathetic non-DA observer, "I understand why Dick did it, but I it created problems with getting a consensus afterwards." In the words of Paul Ericson, "Our strategy was to try to stretch a single into a triple without touching second base." This unorthodox strategy was possible because a still relatively new Director of Central Intelligence (DCI) -George Tenet – and executive director (the CIA's chief operating officer and third-ranking official) were focusing their attentions elsewhere, on rebuilding the DO and the DI and establishing a new agency-wide strategic direction.

Calder was surprised at how easy it was to sell their proposal to OMB and the Agency's authorizing committees. "I was open to anything new coming out of that moribund agency," recalls Cathy Eberwein, staffer for the House Select Committee on Intelligence. "When new ideas surface, I tend to look quite kindly

on them." "They thought this was a good government," Grayson notes. OMB was impressed by the way the Agency had linked the working capital fund to ABC costing, since many working capital funds in other government agencies had failed because operations didn't charge prices that fully reflected their costs. An OMB staffer who was expert on working capital funds in other agencies began to advise the DA on lessons learned from other agencies.

In talking with OMB and congressional committees, Calder and Ericson spoke about how the proposed changes embodied the intent and approaches of the Government Performance and Results Act, a bipartisan piece of legislation passed in 1993 that required government agencies to make more use of performance goals as a management tool, and Vice President Gore's reinventing government program. (Given the CIA culture's strong inward-orientation and conviction that it was very different from the rest of government, the two seldom mentioned these external inspirations internally, and in interviews with DA managers they never came up as a perceived impetus for change). In the 1998 CIA reauthorization bill, the House included language authorizing the DA through March 2000 to provide services to the rest of the Agency on a reimbursable basis, and to establish working capital funds, with approval by OMB and an annual report by the CIA's Inspector-General, both provisions added to the CIA's original language by OMB. In the House-Senate conference on the bill, the Senate accepted the House's language. The conference report on the bill in October 1997 noted laconically that "the managers welcome this initiative to make the administrative support services provided by the CIA more efficient and competitive." Noting Calder's background in recruiting spies and in covert operations, an internal critic remarks that "people give him good marks for pulling off an operation."

6. Saving the Savings for the Customers

A crucial part of preparing for the new order involved grappling with a chronic problem in government that often goes under the name "scooping up the

savings." The perception (and often the reality) in government agencies is that if an operation succeeds in saving some amount of money by doing business in a smarter way or eliminating an unnecessary activity, the entire sum will be taken away (or "scooped up") by the organizations own budgeters, by the Office of Management and Budget, or by congressional appropriations committees at the first opportunity an redistributed to other programs or activities seen as more worthy. This, of course, eliminates any incentive to save money in the first place. Business as usual would kill giveback immediately. The way to convince customers that the new order was a good idea was to dangle in front of them the prospect that if they didn't spend their whole giveback because they had gone to cheaper sources or economized on their use of services, the money left over would be theirs to keep for mission needs. If the extra money was scooped up, the mission directorates would get no benefit from using more wisely the money they had gotten.

Calder got Mary Sturtevant, the comptroller and a strong supporter of his efforts, to help them with this potentially deadly problem. Sturtevant announced to the mission directorates that savings after giveback would not be scooped up. This policy would be implemented through the Agency's five-year budget plan, a set of outyear numbers for projected CIA spending in fairly detailed categories that is updated each year. The numbers are somewhat speculative, especially further out in the five years, and they do not represent actual appropriations or even a cast-in-stone commitment for what they president's budget would actually propose for the next year, but they at least provide some sort of baseline. (The Department of Defense and the intelligence agencies have such give-year projections, though many civilian agencies don't.) The comptroller stated she would use historical date on how much money the mission directorates had been spending on any services subject to giveback and keep that sum in over the fiveyear budget planning numbers. Every organization had a list of unfunded projects that come in just "below the line" in their final budgets. The idea was that savings on administrative services could be used to fund such projects.

"The message to the mission directorates," Sturtevant says, "was "Keep good records. We don't want the savings going to buy furniture, but if you use it for mission, that's okay." OMB and congressional staffers accepted this idea with little resistance, at least partly because the amount of money involved wasn't very much compared with the CIA's overall budget. "If a station chief gets an extra \$20,000 because they've saved money, that's meaningful to them, but for us it's really below our radar screen," a congressional staffer notes. "I have assured them personally that I will not be looking for those savings," says Peg Evans, who was in charge of monitoring the CIA for OMB.

7. The Logistics Operation Center

Originally, the plan called for three pilot programs beginning October 1, 1997, (the beginning of the 1998 fiscal year). These were the logistics operation, an onsite computer store, and the DA's training operation. But as the time approached to get approval to move forward, Calder concluded that only the Logistics Operations Center had its ABC data and its business plan in good enough shape to be ready.

The main job of the Logistics Operations Center (LOC) is to ship material, both within the US and overseas, to CIA employees who needed it for their work. Some material is shipped, both domestically and internationally, by commercial means; classified material is transported internationally by special CIA flights and domestically by CIA-controlled trucks. Materials are packed in different ways and shipped at different priority levels.

The LOC had been a showcase for earlier business process improvement efforts at the CIA, starting as early as 1990. Using a logistics contractor who helped them undertake a significant reengineering effort, the LOC had succeeded in cutting inventory levels dramatically enough to close down one of its two warehouses, as well as reducing customer order processing time from five days to two and incoming goods receiving time from three days to one. For their efforts, they had won an award from Vice President Gore's reinventing

government program. Notes Calder, "They were our showcase for good management. They needed to be first."

Approval for givebacks had to be obtained from the Agency Executive Board, a coordinating body consisting of the directors of the four directorates, the comptroller, and chaired by the executive director, which dealt with issues involving more than one directorate. With the other two pilot candidates having dropped out, Calder went to the board in the summer of 1997 with the modest request that the LOC budget be given back to the mission directorates and the LOC financed through a working capital fund. Both the executive director and the comptroller supported the idea, and Calder didn't even need to defend it. "We presented it as a small prototype and said, 'Give it a try." Ericson notes. The LOC constituted one-half of one percent of the DA budget. "We viewed the vote on the LOC as a mandate for the concept. The rest of the board didn't."

The head of the LOC during much of the process was Ken Good, son of a CIA employee, with a master's degree in public administration from George Washington University, who had worked in the mailroom while studying, and in CIA logistics after graduating; he had also spent a number of years outside the Agency as a city planner in Maine. Good has been a supervisor placed in charge of the LOC's ABC effort. When his predecessor was promoted in April 1997 to be the Agency's chief procurement official, Calder chose Good as LOC chief.

"I was one of the first converts to what Dick was trying to do," Good recalls. "The first time I head Dick talking about a working capital fund, I was convinced. He's pretty passionate. And I had read management books and articles in the *Harvard Business Review* on my own that made similar points to the ones he was making." Good remembers an incident, after the giveback pilot had begun, when Calder called him out of his morning staff meeting to tell him about a cable he had received from the field expressing concern that the decline in the number of LOC support flights risked its ability to support the CIA mission. Calder wanted Good to get into a van with him later the same day to go out and visit the customer personally to explain the new order. Ten minutes later, Calder

called back to say that would be impossible, since he had discovered that the customer was overseas. "That really sends a message that Dick cares about the customer and wants the customer to understand that this is not an attempt to cut back on service, but to provide better service, that we want the customer to value our service enough to be willing to pay for it."

"I went through a lot of emotions," says Good. "I was very anxious. I remember coming in one weekend one month before we came up. I said to my folks, 'We've got to run the numbers again!' I was skeptical about whether we'd included all our costs in our prices. We ended up changing our prices right up to the last minute."

The LOC began as a customer-funded organization on January 1, 1998. The result was far more dramatic than anyone had expected. Quickly it became apparent that demand for LOC services was below projected levels. Specifically, customers had previously routinely requested the highest-priority (and thus most expensive) shipment category and the most secure (and thus most expensive) packaging and transportation methods. Suddenly, shipments that previously had been sent using the CIA's own trucks and overseas flights began being sent by Federal Express.

In May, Calder received the damage assessment for his pilot project. Demand for LOC services was down 30 percent, and, since LOC prices had spread out its fixed overhead costs over a larger number of transactions than actually materialized, the organization was bleeding cash at the rate of \$500,000 per month (on a budget of about \$1.2 million a month). If the LOC, the DA's poster child for process improvement, was running into these problems, what did that suggest for how other parts of the DA, far more fragile plants in terms of process transformation, would fare in the cold world of competition?

C. BUSINESS PROCESS TRANSFORMATION AT THE CIA (B)

1. Introduction

The response of the CIA mission directorates to the DA's first experiment in giveback took its supports by surprise. "The customer reaction to us giving them the money was a wake-up call," Ken Good recounts. "As part of our business plan, we had surveyed customers to estimate demand. What we saw was that if you actually put money into customer hands, their behavior would change dramatically. We had really underestimated the customer reaction."

In response to the LOC losses, Calder scrounged up a million dollars (by taking it from the rest of the DA's budget) to bail them out. The LOC also increased some prices and began pricing some previously free services. Good also developed a "remediation plan" for the LOC. In countless little ways, the LOC found opportunities to save money:

- A number of contractor employees and detailees were let go. Previously, the LOC had staffed at a capacity allowing it to deal with sudden surges in demand for its services. Now, instead, it contracted with a commercial firm to deliver unclassified material, with another company to deliver cleared contractor employees on short notice, in the event of demand surges. Letting go of contractor employees was considered a safer bet than dismissing any of the Agency's own staff. The CIA is even more sensitive about "reductions in force" (RIFs) that is, firing government employees than are most federal agencies because of the concern that RIF'ed employees would be security risks.
- Truck cleaners had previously done their work on Saturdays, when they
 needed two escorts, on overtime pay, provided by the LOC. They began
 to work on Fridays, when things were quiet (so they could get their jobs
 done) but no escorts were needed.

- Truck drivers on the road started buying gas at cheaper gas stations, rather than more expensive truck stops.
- Customer service representatives were merged into the transportation booking operation; the two kinds of employees were cross-trained to do each other's jobs, to minimize employee downtime due to peaks and valleys in demand for the two kinds of skills. Something similar was done with employees who did receiving of inbound shipments and crating of outbound ones.

Asked how the experience had changed him as a manager, Good responds: "I interact with customers much more than before. Before I didn't worry about how a customer might react to a mistake. Now I see myself getting involved. It's hard to learn business skills. I continued to learn them. Now I read business books and magazines every change I get. And I read them differently now than before."

By the end of 1998, the LOC was back in the black.

2. Calder Presses Forward

The losses at the LOC, however, were an issue for far more than just the LOC. The LOC's problems "didn't help" with Calder's efforts to gain support from skeptical office directors. In the words of one observer, "Those who were skeptical began consciously to drag their feet." Public griping began. Calder was perceived by some internal critics as isolating himself within the DA, stopping, for example, regular meetings with some of his office directors.

Still, Calder pressed forward. BPTPO decided that seven offices, accounting for 40 percent of the DA's budget, were promising candidates for the next round of givebacks. These included some of the central administrative services in the Agency; the Office of Communications, which ran all of the Agency's communications infrastructure (and was the largest single line item in the DA budget); space allocation; and the Agency's in-house customer software

design operation. The plan called for the givebacks to occur in fiscal year 1999, beginning October 1, 1998, only ten months after the LOC pilot.

"Dick was surprised by how much demand had gone down at the LOC," Paul Ericson notes. "So he wanted to make sure that none of the other organizations went out until they had their acts together." They worked at refining their ABC numbers and their business plans, under the eye of the BPTPO.

As preparations for a new round of givebacks proceeded, a partial "out" for some offices emerged. Most DA offices argued that security considerations of various sorts precluded organizations outside the CIA from providing services to Agency customers. Use commercial travel agents for airline tickets? Impossible, went the argument – ticket stock or ticket numbers that blew the cover of the Agency employees would get issued. Use commercial livery services instead of the Agency's own motor pool? Impossible – think of all the secret conversations drivers might hear.

Grayson tended to view such arguments skeptically. There were often at least parts of a service being delivered where there were few security implications – airline tickets for employees not under cover, for example. Commercial vendors could get clearances for their employees. And he argued that often the Agency could mandate certain policies to insure security without mandating that customers should be required to buy it from the DA in order to get those policies followed. But Calder became willing to consider arguments for sheltering services from non-Agency commercial competition on a case-by-case basis – to have them provided as what came to be known as "utilities" (meaning that the mission directorates would get a budget giveback, but the DA would retain a monopoly for provision of the service). In these situations, a DA "rate control board," with the approval of the Agency Executive Board, would set prices rather than marketplace competition. This was a departure from the strong theme, first articulated in *The River House Report*, that the impetus for change within the DA would come from giving mission directorate customers a choice

about whether to use DA services, or not. But it was not a total abandonment of the concept behind givebacks, since it would still reward customers for reduced consumption and thus encourage them to participate in cost-cutting efforts, which was one part of the case for the new order. And it did provide at least some pressure (since smaller amounts of high-priced, poor-quality services would be brought by customers) for efficiency and effectiveness in service provision.

BPTPO had chosen the seven organizations for the next phase o the basis of having worked with them to that point on ABC and their business plans. "None of them really volunteered," Calder says. By the time Calder was ready to seek approval from the Agency Executive Board for a new round of givebacks in the summer of 1998, BPTPO told Calder that not all of the seven had presented business plans that made a convincing case that they were ready to compete; accordingly, the list of seven was pared to three – the motor pool, secure telephone service, and building space. Telephones and builder space were proposed to be run as utilities, the motor pool partly as a utility and partly in a competitive environment. In terms of dollars and significance, the motor pool was a relatively minor operation, telephones somewhat larger, and space by far the most significant of the three.

The motor pool ran limousines for senior officials (including the mission-critical daily briefing for the President of the White House) and van service among the CIA locations (and to the State Department) for others. It had been cut every year in the context of the Agency budget woes until it was finally defunded entirely in 1996. For a year, the DA picked up the \$3.5 million tab out of unearmarked funds, and the next year it passed the hat among the mission directorates.

Calder decided the limousine services would be opened up to outside competition (though the in-house motor pool had a real competitive advantage since its cares wouldn't have to go through a special clearance process to get onto the complex). Calder separated the operation from the LOC, of which it had previously been a part, and gave it a new director, Brent Fritzeen, who had

worked on ABC as a relatively junior staffer in another office in the DA. Calder choose Fritzeen, whom he had never meet, at the recommendation of BPTPO head Paul Ericson. "At first, I had no idea of what this was," says Fritzeen. "But now I've bought the concept. I'm a total convert. We have to be fiscally responsible and get out of the mindset of spending all of our appropriated money by the end of the year." Fritzeen was impressed that Calder quickly answered his e-mails and took his phone calls, though he was merely a GS-14 middle manager.

To prepare itself during the business planning phase, the motor pool undertook dramatic cost-cutting. It canceled an expensive sole-source contract for drivers and converted the employees into in-house staff working in limited term contracts. It cut back the number of shuttles to the Sate Department. And, most dramatically, it changed the shift structure of its shuttle drivers. The shuttle operated between 7 a.m. and 5:30 p.m.; and since everyone worked a 9:00 – 5:00 shift, 2-and-1/2 hours of overtime a day were built into the system. By creating one shift that started at 7:00 and another that ended at 5:30, overtime was significantly reduced.

As with the motor pool, the secure telephone service operation chose for the next phase of giveback was cut out of a larger unit and headed by a new manager. Preparation for the transition to the new environment was the responsibility of Camille Hersch, who had recently come to the DA after 18 years at the CIA's Foreign Broadcast Information Service (where, towards the end of her career there, she had worked on process transformations issues) and was appointed to her job only in July 1997, when her previous boss retired. "I have a lot of passion around the working capital fund notion," Hersch says. "We need to revitalize our infrastructure. In a time of declining budgets, this is a matter of survival."

The most important business Calder wanted put into working capital fund was CIA building space. In terms of budget, it was one of the biggest elements of the DA, behind only information technology and communications. There was a

view that considerable space savings would be possible if mission directorates actually had to pay for what they were using; Congress had for years turned a skeptical eye to Agency requests to build or lease new space, based on the impression that waste in its use of existing space was rampant. It also turned out that the cost of headquarters space was less than that of most of the space in other Agency leased or owned space; some congressional staff hoped that location decisions prompted by that price differential would allow the nicely symbolic step of closing an Agency building.

"Rob" Robertson, the had of facilities management, got his job in the middle of the business planning progress within the division when the previous head retired; before that, he worked in the DA's logistics operation. "This seemed like the ultimate assignment, something new and different," he recalls.

3. The Depreciation Issue

Proposing telephone and, especially, building space for giveback raised dramatically an issue that had been skirted in the way Calder had tried to sell the idea to the mission directorates. Originally, the suggestion had been that the mission directorates would be given a sum of money equivalent to what they were currently paying for DA services and that the services would then be priced to reflect those costs. If the directorates could economize on service use, they would pay less than they receiving in giveback, and the difference would be theirs to keep.

The optimistic equation, however, didn't take into account the need for investment to replace deteriorating capital assets. Say that headquarters needed a new heating and ventilation system every 2 years. One way to deal with that would be to put some amount of money aside each year in a recapitalization fund, such that at the end of 25 years money would be around to pay for the new system. However, as an Agency observer notes, "Recapitalization is not something the government does well." The tendency was to budget little or nothing for recapitalization, and then to obtain a one-time appropriation when a

capital asset broke or was about do so. Alternatively, in the tight budget environments of the 1990s, the mission directorates often had money unceremoniously taken, or "taxed," from them in the middle of the budget year to pay for an emergency capital expense. So existing DA budgets – the sum of money that the mission directorates were to receive back – reflected insufficient amounts for recapitalization.

This was not an important issue for the LOC, with minimal capital assets. It was much more important for telephone infrastructure equipment and for buildings, particularly because of the large unfunded recapitalization requirements for the Agency's 40-year-old headquarters. "We have a real fear," notes Robertson, the facilities management chief, "that we're going to system some major systems outages." The Agency had established a building recapitalization fund in the early 1990s, but it was woefully insufficient. "We have huge unfundeds in this area," Mary Sturtevant, the comptroller notes.

In the new non-appropriated environment, the costs charged customers for DA services would need to include more realistic sums for recapitalization, since the possibility would no longer exist for one-time appropriations or an agency-wide "tax" to fund replacement or repair of capital assets for these operations. DA activity business plans therefore included depreciation expenses, that is, an ongoing recapitalization amount that would be part of the business' pricing structure.

But depreciation marred the rosy scenario of savings for plowback mission that could be obtained by virtuous economizing. Recapitalization funds meant that unit prices for DA services would be higher than previously – and that at the end of the day the giveback money might no cover the expected demand for services at the new prices. Says a sympathetic non-DA observer: "Dick's message had been, 'Look at how you'll get this money back.' But we said to Dick that he had to recognize that people will be paying more. He had to start pitching this another way." To be sure, as Mary Sturtevant notes, "the bottom line is that even if the customer doesn't see the money in their pocket directly, they're still

ahead, because when these capital emergencies come up, we just tax their appropriation during budget execution year to pay for them." But the whole issue fed the suspicion of the mission directorates that, one way or another, they were going to get the short end of Calder's revolution. "The DO says that if you need extra money to fix up headquarters, the DA should go to the Hill, and ask for more, and we'll support you, instead of what he's doing," a DO source suggest. "Dick's only response is that that's the old way of thinking."

It was however, decided that depreciation charges for telephones and buildings would be phased in gradually (reaching a full level, using IRS depreciation schedules and industry benchmarks, in 2001 for the initial working capital fund activities). This would make the new order more attractive than otherwise to the mission directorates, and, it was rationalized, also give them more time to reduce their service demand levels so they could better absorb higher unit prices.

4. The Customers Revolt

As the new ideas approached more and more serious, opposition grew not only within the DA but also within the mission directorates, particularly the DO, which was by far the DA's biggest customer. The basic objection among DO officers was that their jobs were too important for them to be bothered with what they considered to be administrative trivia. "This diverts me from my mission," they would say. "We joined the DO to go overseas and go in harm's way. We joined for that adventure. We did <u>not join</u> to do unfun stuff. This isn't fun," says a DO source. "You have a customer base," notes an internal DA critic, adopting the "customer" terminology, "that says, 'We're not McDonald's. DA, do your job." People here don't have business backgrounds. So the terminology is foreign to them" (Another DA source referred to his unease about becoming a "rug merchant.") To a considerable extent, this objection was a red herring, since the whole infrastructure of DA support officers in the mission directorates would continue to be there to shield DO gunslingers from having to make decisions

about what kinds of packaging they wanted their guns sent in. It would be the support officers who would be making the economizing decisions on behalf of the mission directorates about how to spend budget giveback money. And one might also say that DO customers were crying all the way to the bank, since by reducing their demand for DA service, they would be saving money that could go into mission.

To be sure, many were skeptical that they really would get to keep any savings. "Maybe it would work a year or two, then we'll get a new comptroller, and the policy will change," says a source in the DO. "This culture isn't always the most trusting, so lots of people assume that at the end of the day they're going to lose from this," notes a source in the Directorate of Intelligence. And the new order got associated in the minds of many in the mission directorates with the general hard budgetary times the Agency was experiencing. "At a staff meeting the other day," a source in the DO states, "we gave out medals and were told that inscriptions won't be put on the medals because of lack of funding. The suggestion was that this was related to the working capital fund." The people in the mission directorates were used to high levels of service that were "free," and they wished those glory days could continue.

Whatever their reasons, DO officers made known their discontent to senior managers at the agency. Their vocal opposition put a particularly ironic twist on Calder's mantra about customer service; in effect, the oppressed masses on whose behalf he was waging a battle of liberation, against enormous internal resistance, were saying they weren't interested in being set free. To switch metaphors, the customers were acting a bit like those people who, after the breakup of the Bell system monopoly, longed for the days when they didn't have to make choices about their long-distance carrier. And the new Director of Central Intelligence, George Tenet, was, not surprisingly, silent, preferring to devote his time and internal political capital to "sexier" issues.

5. The Meeting

Tension was high around Calder's office in mid-August. Calder was preparing to appear before the Agency Executive Board to obtain approval to put space, secure telephones, and the motor pool into a working capital fund environment. "This is our Rubicon," Calder said in advance of the meeting. "If we get approval, the question will be not whether we move to the new model, but how and when."

After his confirmation as Director of Central Intelligence in the summer of 1997, Tenet had brought a new director of the DO on board, a career intelligence officer name Jack Downing. Downing was "old school CIA," Harvard class of 1958 former Marine. Downing had earlier been an internal opponent of Calder's strategic plan for the DO. He had agreed in the Agency Executive Board to the LOC budget transfer, but that was only a month after his arrival. "I don't know what I'm voting on, but okay," he said at the meeting, according to one account.

As Calder prepared for the board meeting that would determine whether his ideas would be implemented, he knew that this wasn't a central issue for Downing and that Downing's opposition was mostly visceral. But Calder also know he was the head of the weakest directorate in the Agency and that Downing, head of the most powerful one, would be opposed to what he was trying to do. He could count on the support of Mary Sturtevant, the comptroller. The executive director, David Carey, was sympathetic in principle but concerned about the lack of political consensus. George Tenent, the head of the Agency, would stay clear of these sorts of issues, unless, conceivably, the DO asked him to intervene against Calder.

"The executive director wants to avoid a divisive meeting with a split vote," said Calder, thinking about the meeting he was facing. "He also wants to avoid having someone go to Tenent behind his back and kill it. And, of course, if we don't win at the board, that will embolden the opposition within the DA."

"Dick has a lot of chits to pull in on this throughout the Agency," one non-DA insider notes. "He's made this into an issue of his personal success or failure. In the back of their minds, many people are thinking, "If this goes down, it'll cripple Dick, and we can't cripple Dick.' So opponents pull back. They'll give him more room than they'd give others." But there's another view as well. "He's Indira Gandhi," says a DA support officer, referring to the Indian Prime Minister assassinated by her own bodyguards. "He's so far in front of the troops, if he looks behind he'll see nobody's there." And Calder himself sighs, "Change is terribly difficult when there's nobody pulling on the chord but you."

D. BUSINESS PROCESS TRANSFORMATION AT THE CIA (EPILOGUE)

In advance of the August 1998 meeting of the Agency Executive Board, David Carey, the CIA's executive director, decided he couldn't support moving immediately to put the building space into the working capital fund environment. The reason, he stated at the meeting, was that the DA's giveback formula, which divided up the space budget based on the square footage used by the different directorates, was problematic. It would reward space gluttons and punish those who had already economized on space usage. He presented these concerns at the beginning of the meeting. Calder volunteered to go back to the drawing board and rejigger the formula. Carey suggested that Calder return to the board in six months with a new formula the board could decide on. Calder agreed.

With the most ambitious give back off the table, the rest of the meeting was surprisingly calm. Downing stated politely that he'd prefer seeing six months more experience with the LOC before any additional organizations were added to the working capital fund. But at the end he didn't vote against the proposal that secure telephones and the motor pool be moved into the new environment.

Less than two months later, on October 1, the old telephone services division of the Office of Information Technology changed its name to CINTELCO (Central Intelligence Telephone Company). The most immediate and dramatic effect of the giveback on customer behavior was a sudden drop in the number of

phone lines customers were using. Previously, there was no reason to economize on the number of phone lines in an office or to cancel a phone line if an employee left and wasn't replaced. A month after customers got their first bills, the mission directorates had requested removal of close to 15 percent of the Agency's phone lines. (Fortunately, with the LOC experience in mind, CINTELCO had priced its services to assume a decline in demand for lines three times that number.)

The CINTELCO entry was not, however, without controversy. The demand assumptions used by CINTELCO, plus the complicated manner in which telephone services were paid in the appropriated environment, led to the perception (and sometimes the reality) that there was a significant "gap" between the givebacks and the total phone costs under the new system. This, plus bad data on actual telephone inventories, led to problems later on.

The CINTELCO rushed to create both brand visibility and increased demand for its services. It bought up some old British red telephone booths and placed them in the area near the CIA cafeteria, with a big "CINTELCO" sign on each. Very dramatically and visibly, CINTELCO opened up a store, also near the cafeteria, to provide advice and sell equipment such as pagers and phone cards. (These were initially only for official use, but there were plans to extend CINTELCO's charter to include selling gear for personal use. "It's easier than going to the mall. And we can get quantity discounts based on the total volume of our purchases.") CINTELCO also began getting into the consulting business, advising customers how to use technology better (for example, a customer receiving many incoming phone calls could use automated call distribution technology to cover a given number of incoming calls with fewer people) – and, incidentally, buy more equipment through CINTELCO. "For now," says Camille Hersch, the CINTELCO head, "we haven't looked for any external customers." But down the road we could provide secure telephone services to other federal agencies. Our niche is secure networks."

At the motor pool, Brent Fritzeen introduced a number of new service alternatives for customers. Limousine customers could "rent" for a flat rate an on-call dedicated driver for an extended period of time; the very senior officials able to buy such service liked the idea of having the same person available to them. Fritzeen got the idea after reading about a company that offered unlimited flat rate corporate jet service to executives. The motor pool also sold hourly rates, with a one-hour minimum (commercial competitors imposed a four-hour minimum); it also introduced a service guarantee promising a free ride if the driver was 15 minutes late.

In February 1999, the six-month waiting period David Carey had proposed for making the final decision about putting building space into the working capital fund came and went, with no decision made and the issue not yet brought back to the Agency Executive Board for consideration. During this time, requests were made for various refinements in the operation's billing procedures. The problems associated with the CINTELCO "gap" and related data issues led some to question how viable the building facilities enterprise would be. In March 1999, the Agency Executive Board approved the entry of a small applications development enterprise into the working capital fund, but still balked at the "big" issue of building space. Internal politics within the Agency continued to be on Carey's mind, but in May, the internal politics began to move. Jack Downing announced his retirement, effective July 31, 1999. The CINTELCO gap began to close with the announcement of a significant rebate to customers and a 20-30 percent reduction in line costs for the following year. While the Agency looked likely to receive a nice cash infusion in the budget surplus environment of the turn of the century, and the fire on the burning platform looked not quite so dangerous, there also appeared to be a renewed effort to push a major enterprise into the working capital fund – after Downing left.

Meanwhile, several additional DA activities were preparing to be next in line for entry into the fund. As preparations for entry made it on the agenda of more offices, Calder began encountering his most dug-in opponents, who had

avoided being "volunteered" as long as possible. The head of one organization scheduled to enter a working capital fund environment as a utility in fiscal year 2000 grumbled that he had no desire to turn his operation into a collection of "rug merchants." Some observers argued that Calder had gone too easy on his internal critics. "He should have gone to the director and gotten an okay to get ride of some of these people," argues on supporter. "People were able to ignore or defy Calder without any consequences," says another. "I did have some heart-to-hearts with the critics," Calder notes. But he says it wasn't so easy for him to sweep his internal critics aside. "Customer resistance didn't help and the lack of consensus among the Agency's senior leadership also slowed us down." However, as hostile office directors left (to retire or to take jobs outside the DA), they were replaced with enthusiasts. "Over time," a DA critic says, "as you continue to replace leaders, and the main criterion for appointment is loyalty to this, the opposition will go away."

In September 1999, the Executive Board approved the entry of the Agency's "Landlord," Facilities Management, into the Fund. Representing over 10 percent of the DA's budget, it became the first significant component to enter the fund. While the bulk of its service (the rental of floor space to Agency components) is a utility function, some consulting and rehabilitation functions were competitive from the outside. At the same time, the Printing and Photography Group and the warehousing function at the LOC also entered the The later folded seamlessly into the LOC's operations, but the fully competitive printing plant saw an initial downturn in demand that represented both industry-wide trends of reduced demand for printing services generally and the growing popularity of desk-top publishing within the Agency. More importantly, even as a utility, the ability of customers to retain the results of smarter decisions about the use of space have, in the first six months, led to over 68,000 square feet of office space being given up and rented to higher priority Agency customers.

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